

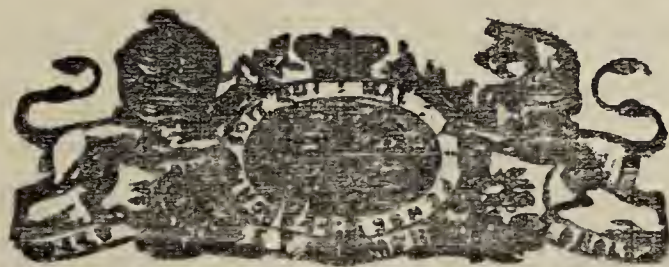
REPORT
ON THE
SANITARY ADMINISTRATION
OF THE PUNJAB
AND
PROCEEDINGS OF THE SANITARY BOARD
FOR THE YEAR 1913

BY
LT.-COL. S. BROWNING SMITH, D.P.H., I.M.S.,
Offg. Sanitary Commissioner, Punjab,

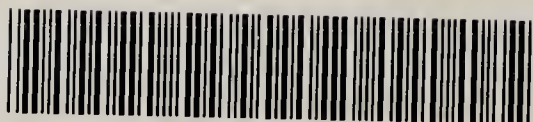
AND
THE REPORT ON SANITARY WORKS
FOR 1913

BY
MR. A. S. MONTGOMERY,
Offg. Sanitary Engineer, Punjab.

Price: Re. 1-0-0 or 1 shilling & 6d.



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Section II.—European Army.

No Remarks.

Section III.—Native Army.

No Remarks.

Section IV.—Jails.

No Remarks.

Section VII.—Vaccination.

(Separate Report.)

Section VIII.—Sanitary Works, Military.

No Remarks.



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(The text of the Sanitary Report is limited to 20 pages and that of the Sanitary Engineer to 4 pages.)

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READ —

The Report on the Sanitary Administration of the Punjab for the year 1913, by Lieutenant-Colonel S. Browning Smith, I.M.S., officiating Sanitary Commissioner, Punjab.

REMARKS — The year 1913 was a healthy one though the death rate was higher than in the exceptionally healthy year which preceded it. The chief meteorological features were the excess of rainfall in May and June, the defect in temperature in the same months, the early cessation of the monsoon, and the unusual dryness of October and November. The average price of wheat and gram was higher than in 1912, while the rates for barley and other grains fell slightly. The first regular wages survey shows a general rise in almost all classes of wages, both urban and rural, as compared with the rates ascertained at the preliminary survey held in 1909.

2. In paragraph 4 of the report the Sanitary Commissioner has used the vital statistics to correct the census figures. The death rate *per mille* of the corrected total is 1·2 less than the rate *per mille* of the census population. Last year the difference was 0·7. At this rate the use of the census figures of 1911 would in 1920 give an error of nearly 5 per 1,000 in the rate. The margin of error is thus considerable and it is, in His Honour's opinion, worthy of consideration whether the method of working out rates on the uncorrected census figures should not be abandoned. The Sanitary Commissioner might collect information as to the practice in other countries.

3. With the healthy conditions recently prevailing, the birth rate continues to rise, the provincial rate (45·4) being 3·1 *per mille* in excess of the average for the previous five years. The increase in districts varies from 9·3 to 0·7 *per mille*: in one district alone, Dera Gházi Khan, has there been a decrease, amounting to 2 *per mille*. The excess of male over female births by about 10 per cent. was maintained, Simla being the only district where the female rate was the higher.

4. The death rate for the province was 30·2 *per mille* so that there were 2 deaths for every 3 births. Infant mortality was higher than in 1911 and 1912, though less than in many recent years. The conditions which lead to a high rate in India are described in paragraph 28 of the Resolution of the Government of India, dated 23rd May 1914. His Honour agrees with the Sanitary Commissioner that matters might be considerably improved by providing *dais* with a sound training in maternity cases and simple hygiene. Efforts are being made to realize this object, but it is, in his opinion, more to the enlightenment of the public generally and the education of the mothers themselves that we must look for the true remedy. He is glad to see that there are some signs of public opinion—especially in the towns—awakening to the need of alleviating conditions under which 23 of every 100 children born die before attaining the age of one year.

5. The persistently low death rate in the town of Khangah Dógrán was commented on in last year's review. The Sanitary Commissioner now shows that its claim to be the healthiest town in the province was illusory and based on incorrect figures. Leaving out of account Lyallpur where, as the Sanitary Commissioner explains, the low death rate is due to factors peculiar to the town, Shahpur has the lowest death rate (11·67) for the year under report.

In the three large towns of Lahore, Amritsar and Multán the death rates were in excess of last year's rates, but, except in Lahore, substantially better than the average rates of the preceding quinquennium. Mortality from fevers was particularly high in a number of towns in the south-east of the province. Anti-malarial measures are already being taken in the neighbourhood

of Palwal, where, as well as at Kaithal, an exhaustive malarial survey has been made. The further measures which will be taken on the recommendations made by the Chief Malaria Medical Officer will, it is hoped, effect a substantial improvement in the health of these towns.

6. As usual the rural death rate is still considerably below the urban, but while the latter for the years 1875—1900 amounted to 40·3, the rate for the years 1909—1912 has fallen to 35. It is impossible to say whether this improvement is due to improved drainage and water-supply, better facilities for medical advice and treatment, or greater enlightenment and knowledge of hygiene—it is probably the result of a combination of those causes. In any case it is clear that sanitation and education are making our towns healthier, and in time the same causes will produce the same result in the villages as well.

7. Cholera accounted for 5,811 deaths, 1,695 in towns and 4,116 in rural circles. Fortunately the epidemic was not wide-spread, the worse centres being the towns of Siálkot and Gujrát and the district of Lahore. The district and medical officials made every effort to combat the disease, but were impeded by the opposition of the people themselves, especially in the towns. The reporting agency is still defective, and the delay of 24 days in reporting the first outbreak in Amritsar led to deplorable results, for without early information, prompt suppression of the disease is impossible. Certain suggestions for the improvement of reporting were accepted by the Sanitary Conference and are now before Government.

Small-pox proved more deadly than in any year since 1896, the number of deaths being 38,687. The epidemic was a legacy from the previous year and continued until well into the hot weather. The death rate was lower in towns than in villages and lower in towns where vaccination is compulsory than in those where it is not, but the figures indicate that even in the former the provisions of the Act are not vigorously enforced and the responsibility of the municipal authorities should be insisted on.

Fevers accounted for 17·15 *per mille* of the population, a slight increase on the two preceding years.

8. The plague epidemic, on the other hand, was extremely mild, the total number of deaths recorded in British districts being only 17,904, as compared with an average annual mortality during the previous 9 years of over 180,000. Thirty-nine medical officers were, however, employed on plague duty. In a mild season like that of 1913, almost the only direct preventive measure that is feasible is rat-destruction in a few selected localities. The report supplies fresh illustrations of the value of this. Inoculation which used to be viewed with dread is now regarded with apathy, but is rarely resorted to except during severe epidemics. The people have not yet learned that prevention is better than cure. On the other hand the staff are being utilized for imparting general instruction in sanitary principles, and in giving ordinary medical aid, and this portion of their work is well received and is bringing them into closer touch with the people. The number of their patients (other than plague patients) was more than double what it was in 1912.

The high mortality from dysentery and diarrhoea in the Ráwalpindi District, which is a stock feature of the annual Sanitary Report, requires explanation.

9. As remarked in Section X of the Report the year was one of special activity in sanitary matters and the demands made on the Sanitary Department showed a steady increase in frequency and importance. A second Deputy Sanitary Commissioner was appointed during the year to cope with the increase of work. Efforts to improve the sanitation of towns and villages have received a marked stimulus from the recent generous provision of grants-in-aid.

The problems which confront the Punjab were carefully considered by the Punjab Sanitary Conference, which sat for a week in Simla in August 1913, and whose recommendations have been of great value to Government in fixing and defining a policy which, while not ambitious, will, it is hoped, meet the most pressing sanitary needs of the province and secure the acceptance, and eventually the active support, of the people whom it is intended to benefit. Action is now being taken on their recommendations. Resolutions have already been issued by Government laying down the policy to be followed in connection with rural sanitation, and announcing the creation of a service of Health Officers and Sanitary Inspectors in municipal towns. A third resolution is now under consideration dealing with town-planning and congested areas. Questions of policy have, however, to be subordinated to financial considerations, but even in this respect there was a remarkable improvement. The Sanitary Board distributed Rs. 1,93,475 to local bodies during the year, while further grants for large schemes were made direct by Government aggregating over 14 lakhs. Administrative sanction was given to schemes of which the total cost is estimated at Rs. 22,58,276, while the water-supply and drainage schemes to which technical sanction was given by Government in the Public Works Department, involve an expenditure of Rs. 5,91,375.

The annual grant placed at the disposal of the Sanitary Board for distribution to local bodies during the current year has been increased to 3 lakhs and a further $2\frac{1}{2}$ lakhs have been provided for rural sanitation. In the allotment of these grants for particular schemes priority will usually be given to applications in which the local body or the locality concerned undertakes to raise a substantial share of the total cost of the schemes.

10. The above figures show that local bodies are moving in the matter of sanitation. His Honour, however, wishes to emphasize the fact that the sanitation of a town or village does not depend merely on the provision of an efficient drainage system or a pure water-supply, but also on a careful observance of ordinary sanitary principles in every-day life on the part of the inhabitants. While, therefore, the local bodies can do much by providing improved drainage and purer water, by efficient conservancy and scavenging, and the like, the voluntary co-operation of the people themselves is essential for any radical improvement in the health of the province. It must be many years before such co-operation can be fully obtained and before the mist of prejudice and superstition is dissipated by the light of modern sanitation, but the results already achieved show that hopes of ultimate success are not unjustified.

11. The figures in statement A seem to call for more careful scrutiny. The Lahore municipal committee used 800 tons of coal which cost them Rs. 12,481. The Simla committee paid little more than double that sum for over 10,000 tons of coal and 30,000 maunds of wood. Sargodha, where 24 million gallons were pumped, is shown as having used nearly five times the amount of fuel used in Lahore for pumping nearly 1,000 million. Possibly in the case of Sargodha for "tons" should be read "maunds." It is not clear why at Amritsar with a lift of 60 feet the cost of pumping should be nearly double what it is at Lahore where the lift is 120 feet, nor why Lyallpur with a population of 20,000 should pay more for its water-works establishment than Amritsar with a population more than seven times as great.

12. The post of Sanitary Commissioner was held during the year under report by Lieutenant-Colonel Browning Smith, while the duties of Sanitary Engineer were performed by Mr. A. S. Montgomery and Mr. D. W. Aikman. The Lieutenant-Governor's thanks are due to them and the other officers of the department for the energy and capacity with which they have carried out their duties, and to Lieutenant-Colonel Browning Smith for a most interesting and instructive report.

ORDER.—Ordered that a copy of the foregoing remarks be circulated with the report and be furnished, with the usual number of copies of the report, to the Government of India; also that a review be published in the *Punjab Government Gazette*.

Ordered, also, that a copy be forwarded to the Sanitary Commissioner, Punjab, for information.

By order of His Honour the Lieutenant-Governor of the Punjab,

J. P. THOMPSON,

Revenue Secretary to Government, Punjab.

SANITARY DEPARTMENT.

ERRATA.

In the Annual Sanitary Report of the Punjab for 1913—

- (1) Page 18, paragraph 51, line 1, *for* "2 84" *read* "2181".
- (2) Appendix B page *iii* paragraph 3 line 5 *for* "26,000" *read* "22,972."
- (3) Page vi, Statement A, *omit* the word "tons" now over the figures "10542" in column 10 against Simla, and *insert* it over the figures 800 against Lahore.
- (4) Page vi, Statement A, against Sargodha, column 11 *for* "2 88" *read* "2488".
- (5) Page XV, Annual Statement No. IV, Ratio per 1000 living for the Province, sub-column 21 against all other Causes *for* "2 46" *read* "248".

Section I.

MR. GILBERT T. WALKER, C.S.I., M.A., Sc. D., F.R.S., Director-General of Observatories, has kindly furnished the following brief summary of the chief meteorological features of the Punjab during the year 1913 :—

Chief meteorological features.

Abnormally dry weather prevailed until about the middle of February when the first rainfall of the winter season occurred. Conditions were more disturbed than usual during the next four weeks, but thereafter dry weather again set in and lasted until the 16th of May when an early advance of monsoon winds took place up the Gangetic plain and gave a burst of moderate to heavy rain in the east of the Punjab.

Rainfall over the Punjab was in large excess in June, in defect by 19 per cent. in July, about normal in August and in marked defect in September. The regular monsoon rains ended over the greater part of the province on the 8th September, about a week before the normal date. October and November were drier even than usual, but in December the recorded amount of rainfall was in large excess of the normal owing to the abnormally early commencement of winter actions.

In the Punjab temperature was appreciably above the average in January, was almost equal to it in February, April and from August to December, and was in defect, both by day and night, in March, May and June.

2. Mr. B. T. Gibson, I.C.S., Director of Land Records, Punjab, has furnished me with the usual return which shows that the average retail price of wheat was $11\frac{1}{4}$ seers per rupee at Ambala, $10\frac{1}{4}$ at Lahore, $10\frac{3}{4}$ at Rawalpindi and $11\frac{3}{8}$ at Multan during the year 1913.

Price of food grain.

The average rates of barley were 16 seers at Ambala, $15\frac{9}{16}$ at Lahore, $15\frac{1}{16}$ at Rawalpindi and $15\frac{5}{16}$ at Multan, and that of jowar $20\frac{1}{16}$, $14\frac{9}{16}$, $15\frac{11}{16}$ and $16\frac{3}{8}$, respectively.

As regards bajra the average rates varied from $12\frac{1}{4}$ to $13\frac{1}{4}$ seers at the principal markets of Ambala, Lahore, Rawalpindi and Multan, that of maize $14\frac{7}{16}$ to $19\frac{1}{16}$, and that of gram $13\frac{7}{8}$ to $15\frac{1}{8}$ seers per rupee.

The rise in price of wheat and gram is generally attributed to the rabi of 1913 not being quite so favourable as that of 1912, and the average price of barley fell owing to less exports to foreign countries than in the previous year. There was an increase in the cultivation of jowar, bajra and maize in kharif 1912, due to climatic conditions, and hence the fall in the prices of these staples in 1913.

3. The first regular wages survey of the Punjab was taken in December 1912, and the result is embodied in a special report by the Director of Land Records, Punjab.

Wages of labour.

Section V.—Vital Statistics.

4. The basis for the calculation of the *per mille* rates in this report is the census population of 1911. Since this census was taken the population has undoubtedly increased, and in consequence the rates calculated for this report are higher than the actuals.

Population.

It has been shown at more than one census taking that if a calculation is made from a previous census by subtracting the deaths and adding the births which have occurred during the intercensal period, the population thus estimated more or less closely approximates to that found at the next census ;

at any rate with an increasing or decreasing population it may be said that in spite of defects of registration of births and deaths, that a population estimated in this way for an intercensal year will more closely represent the actual than the previous census figures, and rates calculated on this estimated population will be the more accurate. As a matter of interest this calculation has been made for the province in the year 1913 and, by this method the estimated population is now 20,156,338 (11,043,781 males and 9,112,557 females) as compared with the census population 19,337,146 (10,608,101 and 8,729,045) showing an excess of 819,192, (435,680 males and 383,512 females); compared with the previous year's estimated population the excess is only 294,457 (155,091 males and 139,366 females.)

Calculated on this population the total death rate is 29.0, 1.2 less than the rate worked out on the census population and with the exception of one district, Simla, in which the estimated population is lower than the census figures, all districts show a lower death rate; the differences vary between 0.6 and 1.7 *per mille*.

The greater the interval that has passed since the last census was taken, the greater will be the error in the vital statistics rates, and it is a question whether the time is not approaching when the present practice should be abandoned for a more accurate one, such as the calculation of population for the middle of each year based on the increase or decrease exhibited in the two previous censuses. If a correction factor could be calculated from the birth and death rates (see paragraph 19 Registration), a very approximate estimate could be made for each year from the rates of the preceding one. Any such change however would necessarily have to apply all over India, or the rates of different provinces would not be comparable.

5. The year 1912 furnished the lowest death rate since 1886 and was by far the healthiest of recent years. General summary, The year 1913, though the death rate showed a rise of 3.56 *per mille* as compared with 1912, may also be regarded as being a very healthy year. Fevers caused a slightly higher death rate than the 3 previous years and cholera accounted for more deaths than in the last four years, and with the exception of plague which was less than that of the previous year the death rates from all the other causes varied but slightly. The birth rate still continues to improve.

6. **Births.**—There were 878,241 births in the Punjab during 1913, 459,417 males and 418,824 females, Annual Form No. I. the rates *per mille* being 45.4, 23.8 and 21.7 respectively. This is the highest number recorded since 1900 and is due to the same reasons as given in the previous year's report, namely, the slight incidence of epidemic malaria in the autumn of 1911 and the general healthiness of that year and the first few months of the year under report.

The male birth rate 23.3 exceeded the female rate by 2.1 *per mille*, this is exactly the same difference as in the previous year.

7. The Central Provinces, as usual, again has the highest birth rate, 49.26, Birth rates in other provinces. the United Provinces coming next with 47.67. These rates are in excess of that for the Punjab, while in the others they were lower, 42.10 in Bihar and Orissa, 36.17 in the North-West Frontier Province, 34.96 in Bombay, 33.75 in Bengal 33.06 in Assam, 32.61 in Burma and 32.2 in Madras.

8. The birth rate for the province shows an increase of 3.1 *per mille* over the average for the previous quinquennium; the district rates vary more considerably. Dera Ghazi Khan is the only district which shows a decrease compared with its quinquennial average, and Mianwali only shows an increase of 0.7; on the other hand the highest increases occurred in Rohtak 9.3, Gurgaon 6.4, Hissar 5.5, Ferozepore 4.9, Jhang 4.8 and Lahore 4.1; in the remaining districts the increase varied from 1.4 to 3.7. Birth rates by districts. Annual Form No. 1.

9. The number of towns with a population of 10,000 and upwards remained the same as in the previous year, viz., 38. The birth rate in these towns amounted to 44·5 as against 45·2 in the previous year and 40·9 for the previous quinquennium. Of the three largest towns Amritsar again had the highest birth rate, 46, Multan comes next with 45, while in Lahore the rate was 37.

Birth rate in towns.

10. With the exception of Simla where there were 17 more deaths than births, the birth was higher than the death rate in all districts. The excess varied and was 15·2 *per mille* for the whole province, 26·0 in Lyallpur district, 24·8 in Ferozepore, 22·6 in Montgomery, 21·5 in Hissar and in 10 other districts it was also above the provincial excess.

Excess of births over deaths.

11. The highest birth rate was recorded in the Rohtak District where it amounted to 53·5, Ferozepore coming next with 51·2 and these were closely followed by Hissar 50·8 and Lyallpur 50·4. The lowest rate was recorded in Simla where it was 21·9, Dera Ghazi Khan coming next with 28·6, while in all the other districts it was above 38 *per mille*.

Highest and lowest birth rates.

12. **Deaths.**—Of the 583,784 deaths recorded in the province, 304,326 were males and 279,458 females, the total death rate *per mille* being 30·2, the male 28·7 and the female 32·0. The rates this year though rather greater than those for 1912 are considerably less than the quinquennial average.

Annual Form No. II.

13. The highest death rate was recorded in the United Provinces, 34·84, the Central Provinces coming next with 30·28. These rates were in excess of that for the Punjab, while in the others they were lower, 29·38 in Bengal, 29·14 in Bihar and Orissa, 27·66 in Assam, 26·63 in Bombay, 24·99 in Burma 24·65 in the North-West Frontier Province and 21·4 in Madras.

Death rates in other provinces.

14. The provincial death rate 30·2 *per mille* was exceeded by those of the Sialkot, Lahore, Rohtak, Rawalpindi, Amritsar, Ambala, Gurgaon and Karnal Districts, in all of these, except Gurgaon in which plague caused considerably more mortality than in the previous year, fevers were the principal cause of the higher mortality. Montgomery had the lowest rate 18·3. Simla next with 22·4 and Dera Ghazi Khan with 23·5, all the others varying between 24·1 and 30·0.

Deaths by Districts—Annual Form No. II.

15. The highest mortality was registered in the months of December and November when it amounted to 2·93 and 2·88 *per mille* respectively, these rates were followed closely by those of May and October which were 2·75 and 2·74. The higher mortality in the last quarter of the year is due to fevers and in May to slight increases under the heads of cholera, small-pox, fevers, dysentery and diarrhoea, respiratory diseases and “all other causes,” while plague shows a decrease. July was the healthiest month closely followed by August and September.

Seasonal mortality—Annual Form No. III.

16. In the review of the previous year's report it was asked that the note, regularly appearing in Annual Form No. V to the effect that the death rate for “other classes” is incorrect owing to misclassification, should be explained. The misclassification is due to the carelessness and ignorance of the primary reporting agency; in some districts all deaths in every class are reported as Hindu or Muhammadan, while, in others, deaths among Native Christians, Sansis and other nomads, Parsis, Chuhars, etc., are returned as deaths of other classes. An effort will be made to improve matters in this respect, but it is evident that at present the reporting of deaths of “other classes” is hopelessly unreliable, in Lahore, for instance, there were only 2 deaths in a population of 4,107, in Kangra no deaths in 4,125; in Dera Ghazi Khan on the other hand 164

Deaths by classes—Annual Form No. V.

deaths were reported, 113 in excess of the actual number living, 51 : in Sialkot there were 198 deaths out of 270, and in Shahpur 173 out of 226.

The rate among Hindus was 30·76, this was closely followed by that of 29·75 for Muhammadans, while the rate for Native Christians was 24·92. The rates for Hindus and Muhammadans did not vary to any considerable extent.

17. The urban and rural rates were 35·65 and 29·66, these rates show about the same difference as those for the previous year.

Deaths in towns and rural circles—Annual Form
No. VI A and B.

In the review of the Sanitary Report for 1912 it was noted that “Khangah Dogran town was again given pride of place among the Punjab towns for healthiness and as in recent years they were so low they (*i.e.*, the death rate) call for some investigation.” Enquiry has been made and it appears that the error has arisen from the fact that the total number of inhabitants was taken to be the combined population of the old and new abadies, whereas the urban vital statistics referred to the new abadi only, deaths occurring in the old abadi being included in the returns of rural circles recorded at the thana, thus the calculation was made for a larger population than the actual. The rates this year have been estimated on the correct population and the death rate is 18·94, the number of deaths registered being 24 as against 33 last year; the death rate recorded last year was 6·75, whereas it should have been 26·05.

As in recent years Multan again recorded the lowest death rate among the largest towns in the province, 31·37 compared with 26·23 last year and 35·22 the quinquennial average; the higher rate is due to increases under the head of fevers and small-pox. Lahore returned a rate of 38·10 compared with 28·54 last year and 33·69 the quinquennial average; this increase over last year's figures is due entirely to fevers. The rate in Amritsar was 40·94 as against 38·33 in the previous year and 50·44 its quinquennial average.

Among the smaller towns in the province rates as low as 10·42, 11·67, 12·17, 14·06, 14·27 and 15·18 were recorded in Lyallpur, Shahpur, Akalgarh, Dera Ghazi Khan Montgomery and Shahkot. The low death rate of Lyallpur has before now been taken to show the extreme healthiness of this town, this of course is not justifiable for the constitution of the population, both sex and age are important factors modifying the death rate; while the proportion of males to females in the British Districts of the Province is about 11 to 9, in Lyallpur it is more than 2 to 1, to be exact 13,353 to 6,225, this constitution obtains in newly colonised towns owing to the influx of a large proportion of male adults, in Gojra for instance there are 3,800 males to 1,617 females, in Sargodha 6,180 to 2,669. A large proportion of adults means a low death rate, and a low proportion of females also means the same thing as there are fewer infants and children of the ages when mortality is heavier. It is interesting to note the birth rate in Lyallpur, for instance, which is 20 *per mille*, considerably less than half that for municipal towns generally, 44 *per mille*.

Among those with high death rates are Gohana with 69·88, Kaithal 63·69, Panipat 59·45, Hodal 58·89, Palwal 56·30, Faridabad 53·71 and Dina Nagar 50·31. In Panipat, Hodal and Palwal the high rate was due to plague and in the latter town partly to “all other causes” as well. In all the others it was due practically entirely to fevers. The conditions of Gohana, Faridabad and Kaithal and the surrounding country are well worthy of inquiry by the Chief Malaria Medical Officer.

A fact of interest may be mentioned here; the average annual death rate, urban and rural, for 25 years, 1875—1900, was 40·5 and 31·5; omitting the years 1901—1908 when the normal was much distorted by plague and taking the figures for 1909—1912, the rates for this period are 35 and 30·5. This suggests that sanitary improvement in urban areas is beginning to have an appreciable effect, for the rural death rate for the same period and calculated in the same way has decreased very little while that for towns shows a diminution of 4·5 *per mille*, equivalent to a saving of about 8,000 lives annually in municipal towns.

18. The highest mortality was registered among infants under one year

Deaths according to classified age periods.—Annual Form No. IV.

of age, amounting to 235.43 in the case of males and 223.82 in that of females, the corresponding figures for the previous year being 210.44 and 201.13; calculated on the number of births during the year, however, the rates work out at 217.61 for males and 216.13 for females in 1913 as against 195.10 and 194.57 in 1912; the mortality at this age group is as usual assigned in the returns to "fevers" the rates for which were in 1913, 102.98 and 100.83 and "all other causes" 95.33 and 89.03. Next to this age group mortality was highest among old people of 60 and over, the rates being 62.39 and 65.82, fever being the chief cause of this high mortality. Children between 1 and 5 years of age came next with rates of 60.97 and 64.17 and in their case also the rate was due practically to fevers. Those between 50 and 60 recorded rates of 23.73 and 23.44 and in all the others it varied between 7.81 and 15.90. The least mortality was recorded in the age groups 10-15 and 15-20.

The greatest hope for reducing infant mortality lies in providing that *dais*, both in rural areas as well as in cities, should receive a sound training in conducting maternity cases, in the care of the infant and in simple domestic hygiene. A suggestion for training rural *dais* in the Ludhiana District has been made by the Hon'ble Sardar Gajjan Singh, and I hope it will materialise.

19. The accuracy or otherwise of the registration of births and total

Registration.

deaths is always a question of the greatest interest, and any light shed on this important matter is very welcome. Mr. T. G. Ackland, the author of the actuarial report in the Census of India Report, 1911, in a paper read before the Institute of Actuaries gave an estimate of the average death rate for the decade 1901-1911 for the different provinces of India based on the mortality shown in the life tables prepared by him; he estimates the death rate for the Punjab (including the North-West Frontier Province) for this ten year period to be 47.2 *per mille* an excess of 7.7 *per mille* over the death rate actually registered, 39.5; on these findings the registered death rate is more than 19 per cent. in defect. By the same calculations the estimate of the death rate of Madras shows a difference of 15.7 *per mille*, in Bengal of 13.8, in Bombay of 11 and in the United Provinces of 8.2. The fact that the estimates given in the body of the report differ rather widely from the second series above-quoted makes it necessary not to lay too much stress on his figures. He has also estimated the birth rates for the same period, and in the Punjab (including the North-West Frontier Province) he gives 52.9 as the figure, 11.4 *per mille* more than the birth rate 41.5, actually registered in the Punjab.

20. The total number of entries in birth and death registers checked

Inspection of birth and death registers.

this year was 1,329,566, this is 9,974 in excess of last year. Of this number 798,133 were entries in the birth register which show a decrease of 518 compared with the previous year, while there were 531,433 entries checked in the death register compared with 520,941 in the year preceding.

Divisional Inspectors checked 70,251 male entries and 62,812 female entries in the birth registers, the omissions discovered being 1,031 and 1,076, which work out at percentages of 1.47 and 1.71 on the number of entries checked, those for the vaccination staff are 313,613 and 279,341, with 3,472 and 3,437 omissions and percentages of 1.11 and 1.23, while the Revenue Staff checked 39,575 and 32,541 entries and discovered 451 and 357 omissions at percentages of 1.41 and 1.10. In the case of deaths, Divisional Inspectors checked 48,384 male entries and 46,189 female entries and discovered 299 and 296 omissions at a percentage of 0.62 and 0.64. The Vaccination Staff checked 201,100 and 180,973 entries and discovered 1,058 and 1,089 omissions which give a percentage of 0.53 and 0.60. The Revenue Staff checked only 29,451 and 25,339 entries and discovered 310 and 228 omissions, the percentages being 1.05 and 0.90. As usual the omissions discovered in the death registers were considerably less than those in the births showing the greater accuracy obtained in the former.

One hundred and sixty-five chaukidars were fined during the year, nearly double the number, 88, punished in 1912, the fines amounting to Rs. 89. In Municipal towns one hundred and fifty-four persons were fined for failing to register births and 78 to register deaths, the fines amounting to Rs. 229, as against 164 in the preceding year; increased activity in this direction will, it is hoped, help to ensure greater accuracy.

Births and deaths among employés at Railway Stations.

21. The births this year were 153 and the deaths 138. No note on this small number appears necessary.

Births and deaths among Europeans and Anglo-Indians.

22. The figures for the year were 326 births and 174 deaths.

23. There were 3,844 births registered among the non-military population of cantonments, and 3,706 deaths as against 3,860 and 3,498, respectively, in the year preceding.

Births and deaths among Non-Military population, appendix to Annual Form No. VI-B.

Section VI.—Chief Diseases.

24. **Cholera.**—After four years of ordinary prevalence, one to two thousand deaths annually, cholera broke out in 1913 in a rather severe epidemic form in certain parts of the Province and was the cause of 5,811 deaths equal to a death rate of 0.30 *per mille*. Counting anything over 3,000 deaths as representing a considerable excess over normal, previous epidemic years since 1893 were 1908, 12,000; 1906, 4,000; 1903, 14,500; 1900, 28,000; and 1896, 5,000.

Although the disease was reported from 24 districts, it was very localised in intensity, and out of 33,112 villages and 128 towns of the Province only 590 villages and 46 towns were infected.

The area of greatest intensity was a bit of country composed of parts of the Lahore, Amritsar and Gujranwala districts; another was in Gujrat town and district, another in Sialkot where the head-quarters town suffered a smart outbreak.

The mortality was greatest in the Lahore District where 3,227 deaths occurred, following this Sialkot District suffered 880 deaths principally in the Sialkot town itself 681 deaths; then comes Gujrat District with 585 deaths, of which 172 were reported in the town of Gujrat. The Amritsar District returned 462 deaths, Gurgaon 120 and Gujranwala 81, in no other district did the cholera mortality reach 80.

During the first three months of the year no death from cholera is known to have occurred. In April 44 deaths were registered, in May and June 235 and 325. In July the number of deaths amounted to 1,055. The largest number 2,885 occurred in August. In September the disease began to decline and the number fell to 1,247, while only 20 deaths were recorded in October. There were no deaths from the disease registered in any district of the Province either in the month of November or December. The seasonal variation differed therefore from the usual, the month of maximum intensity being August instead of July; in 1900 and 1903, for instance, 9,711 and 6,184 deaths occurred in July.

The first case known in the Province occurred on April 13th at Kairon village in the Tarn Taran Tahsil of the Amritsar District, but it was not reported to the Civil Surgeon of the district until May 7th, when the disease had appeared in many other places. This first case was a Muhammadan woman who came from village Chhina Belochan in the Lahore District and passed through different places on the way, and the source of infection could not be definitely ascertained. Her clothes were washed at a well situated in the centre of the village, and the drinking water-supply became infected. The delay in reporting the outbreak and the insanitary state of the village were brought to the notice of the Deputy Commissioner for necessary action against the defaulters.

The second infection was reported from the Sirsa town in the Hissar District where a sporadic fatal cholera case occurred on April 20th. The

deceased was a Hindu mali, and the local Assistant Surgeon was only called in when the man was dying. There was no history of importation, nor any evidence of cholera in the neighbourhood. As a result of this, another case in a female relative occurred, but it could not be ascertained whether she actually attended the first case or partook of any food or water contaminated by him. The disease did not spread as due precautions were taken.

The third occurrence was at Ghariāla village in the Kasur Tahsil of the Lahore District on April 21st. The first case was a woman who arrived by rail from Amritsar city on the day previous to her attack. The Deputy Sanitary Commissioner, Punjab, was deputed to investigate and deal with the outbreak, and in his opinion the woman was probably infected in Amritsar. This infection led to a very severe epidemic in this village and the disease spread to nine other villages in the same tahsil, including the town of Kasur and thence gradually in the whole district of Lahore; in several cases infection was carried directly from this area to the surrounding districts of Amritsar, Gujranwala, Gujrat, Sialkot, Lyallpur, Montgomery and Ferozepore, and also farther afield to the Hoshiarpur District.

The brief survey of the circumstances shows that except that it appears that the epidemic began in the Amritsar District, the actual origin of the infection could not be definitely traced; as far as can be ascertained it was not imported from outside the Province, and if this is so, the question arises where did it come from, for no cholera had been reported for some months. That virulent cholera bacilli can be carried by persons apparently quite healthy is a fact that has been definitely proved in India by Major Greig, and these carriers must be often the primary cause of outbreaks. How long such carriers can remain infective is not yet known, but it is an interesting epidemiological fact that in numbers of cases epidemic cholera appears to originate from a person who has committed some dietary indiscretion, has indulged too largely in meat, melons, etc., and in many of these instances importation of infection appears impossible and cholera has been absent from the locality and surrounding country for months. For long it has been noticed that outbreaks of cholera are often synchronous with the end of the Muhammadan fast when over-indulgence in food is particularly likely to occur. The possibility of the existence of the cholera bacilli in apparently healthy persons until such time as it may be stimulated to activity by indiscretions of diet is not proved, but the epidemiological facts are suggestions, and they at any rate show how difficult and often impossible it is to definitely trace the actual origin and spread of acute infection.

In the limited space at my disposal it is impossible to do more than refer briefly to those places where the epidemic was most severe.

The epidemic in the Lahore District started in the village of Ghariāla; this was the infecting centre of the areas affected in the Patti, Chunian and Raewind thanas. It was in the months of July and August that the epidemic assumed virulent form; the appearance of the disease in tahsil towns such as Kasur and Chunian and important trade towns like Pattoki and Kot Boota Māl favoured the spread of the disease. In some villages infected early the disease was of a very fatal type, persons passing to a state of collapse within an hour or so of the attack; some cases are reported to have died after one motion on the spot where they had sat to answer the call of nature; the mortality in these cases appears to have been not less than 95 per cent. In other villages the disease was quite of a mild type in which the patients generally recovered under treatment.

Prompt precautions were taken to prevent the spread of the disease which broke out in the Lahore Central Jails and Punjab Lunatic Asylum, and it is gratifying to mention that it disappeared there very soon, 10 deaths in all occurred. The delay in reporting the outbreak in villages was frequently brought to the notice of the Deputy Commissioner for such action as he thought necessary.

Captain R. T. Wells, I.M.S., then Officiating Deputy Sanitary Commissioner, Punjab, remarked in his report that Assistant Surgeon Jagdish Chandra and his staff had done good work; the death from cholera of Vaccinator Karm Ilahi is much to be regretted.

There were 462 deaths recorded in the district of Amritsar between the months of May and October. These figures include 85 deaths which occurred in the Amritsar city. The towns of Amritsar, Tarn Taran and Jandiala and 53 villages were infected. The first case of cholera in the city of Amritsar occurred on May 27th, and was an indigenous one, and the actual source of infection remained obscure. Later on in the city quite independently of the first case referred to above, twelve cases occurred simultaneously, all men who had drunk water from a well next to the temple where they lived; the well on being inspected showed that it was being fouled from a house drain alongside, carrying filth and excreta; friends of the patients came pouring in to enquire about the patients' health and carried infection to their houses.

The epidemic in Sialkot city apparently started with the case of a Musalman who became ill on the 30th July about a week after his return from a visit to Lahore and died on the same day; the two cases which occurred in June apparently had no connection with this case. The Musalman inhabitants suffered most heavily, and this was due partly to their prejudice against leaving their houses during an epidemic and also to the fasting incidental to the Roza which was held between August 4th and September 2nd, 1913. Captain R. T. Wells was directed to proceed to Sialkot, and he remained on cholera duty there for about three weeks. He personally attended almost every case, and with the assistance of the special cholera staff undertook every possible measure to combat the spread of the disease. He encountered a great deal of the prejudice, apathy and even opposition on the part of the people. His report in detail was submitted to Government which was appreciated and acknowledged with thanks. Six hundred and eighty-one deaths were recorded at the Municipal office, Sialkot, including the death which occurred in the jail there.

The source of infection in Gujrat could not be traced with certainty, but marriage processions were frequent at that time from places like Lahore, Amritsar and Sialkot, and the probability is that the first case contracted the disease by contact with persons from infected areas; he was a water carrier and was known to have worked in connection with these marriage parties. Up to the 23rd July 1913, 4 cases, all fatal, were reported, all occurring in that portion of the town where the bhishti was attacked; after this no case was reported till the 2nd of August.

About this time, in the same part of the town, a marriage party arrived from Hajiwala village in the Gujrat Tahsil; on its return to Hajiwala a male member of the party developed cholera on the 27th July. The house of this man was situated in the centre of the village, and in the same enclosure the well used by most of the people was located. The town of Gujrat was seriously infected; the disease also appeared in Jalalpur and Kunjah towns and in 57 villages in the district, and 1,004 cases with 585 deaths in all were recorded. The Civil Surgeon himself visited all the localities where cholera was worst and made every effort to combat it.

The difficulties obstructing effective action in suppressing the disease in towns have been well brought out by Captain Wells in his report on the Sialkot epidemic; these are due to ignorance, and to resentment and objection to any interference; Sialkot is now to be provided with a proper water supply, and doubtless this will have a marked effect in diminishing cholera prevalence in the future, for one of the difficulties met with was the large number of private wells, many belong to sacred places which the people would not allow the staff to disinfect. It must be borne in mind, however, that a good water supply is not the only requirement; proper conservancy and scavenging is also needed and the suppression of the common fly.

In villages, assent to preventive measures is much more easily obtained and often assistance is asked for. In a large number of villages during the epidemic of 1913 the outbreak was averted or prevented by the adoption of simple measures. The great obstacle to effective control is neglect in reporting at once the first appearance, the medical staff arriving when the epidemic was in full blast and infection had been spread to other places.

The dealing with epidemic cholera was one of the important subjects dealt with by the Punjab Sanitary Conference and proposals have been made to improve and accelerate reporting and to deal with infection as soon as recognised.

All places infected received medical aid. I wish to record the excellent services rendered by all and particularly those of Captain R. T. Wells, I.M.S., of Assistant Surgeon Udai Bhan, Offg. Civil Surgeon of Gujrat, and of Assistant Surgeon Jagdish Chandra, and to gratefully recognise the whole-hearted assistance rendered by Major J. C. Coldstream, Deputy Commissioner of Gujrat, and by R. D. Thomson, Esquire, I.C.S., at Sialkot.

25. **Small-pox.**—The small-pox rate works out at 2.00 *per mille* in 1913 as compared with 1.57 in the year preceding and 0.72 for the quinquennium.

Annual Form No. VIII.

The total number of deaths from this cause registered in 1913 amounted to 38,687 or 8,348 deaths more than that of the year preceding, the largest annual number since 1896, when 45,084 were recorded, and about three times the average annual number of the last twenty years. The last epidemic of this nature was in 1908 when 28,652 deaths occurred.

The epidemic which commenced at the latter end of 1911 continued throughout the year 1912, 30,339 deaths, and the early months of 1913, but rapidly decreased on the approach of the hot weather. During the month of January 8,508 deaths were reported and in February 8,551, when the epidemic attained its maximum intensity. The latter figure is the largest number of deaths from this disease ever recorded in any one month since May 1879 when the number was 9,701. In March and April 6,863 and 4,256 deaths respectively were registered. In May the mortality again slightly increased, there being 4,636 deaths, but from that month onwards the disease considerably declined and the number of deaths fell to 2,658 in June, 1,438 in July, 719 in August, 345 in September and 197 in October. During November and December 236 and 230 deaths were registered, which, however, were below the average rate for these months. May is usually the month of maximum intensity, and the decrease after February is doubtless due to the diminution of susceptible individuals owing to the long continuance of the epidemic from 1911.

The death rate from small-pox in towns was 1.59 *per mille* 0.45 less than that in rural circles, while for towns in which the compulsory Vaccination Act is in force it was 1.21. There is no doubt that vaccination is better attended to in towns where it is compulsory, but there is still much room for improvement and in order to have all unprotected children vaccinated a stricter application of the provisions of the Act should be enforced.

The rate of mortality from small-pox was greatest among infants under one year of age. The male death rate being 15.02 and the female 14.26. Among children from one to five years of age these rates were 6.52 and 6.64, while in the next five years periods 5-10 and 10-15 it was further reduced to 2.02 and 2.25 and 0.94 and 1.29, respectively. Over 15 years of age the rate was never as much as 1 *per mille* in either sex. The female death rate was greater in all age periods than that of males except in infants under one year and those over 40 and under 50 years of age.

26. **Plague.**—The Inspector-General of Civil Hospitals, Punjab, has furnished the following report, prepared by Major C. E. Southon, I.M.S.,

Chief Plague Medical Officer, Punjab, in accordance with the orders of Government :—

The outstanding feature of the 1913 plague epidemic was its mildness. A glance at the following figures brings this out well—

Years.			Deaths.	
1904	364,740 }
1905	335,365 }
1906	92,115 }
1907	605,270 }
1908	30,682 }
1909	35,652 }
1910	135,507 }
1911	175,633 }
1912	29,894 }
1913	17,904 }

In British districts only.

There were 17,904 deaths in British districts and 2,327 deaths in Native States. Total 20,231 during the year under review.

The mortality for the districts most infected was Gurgaon (5,125), Rohtak (2,004) and Karnal (3,553) in the south, and Gurdaspur (1,036), Sialkot (1,263) and Gujranwala (1,549) in the centre of the Punjab.

There is a significance in the preceding statement, for it is precisely these districts, in particular the southern group, which are the worst infected year after year. This controverts the idea that the Punjab is gaining an acquired immunity.

The main reason for the mildness of the epidemic under review was the early and comparatively weak monsoon leading to conditions most unfavourable for flea breeding in its various stages, which meant a weak link in the plague chain. There is also the fact that the plague department nipped many an outbreak in the bud and thus eradicated *foci*, which, left unchecked, would have been the origin of infection in many another village. It is impossible to assess the extent of these successes, whereas the measure of the failure of the department to gain complete control is obtrusively expressed by the number of deaths.

Seasonal variation.—This was typical of an ordinary mild plague year. Starting with 550 deaths in January, it reached a maximum of 6,697 deaths in April, died down to 106 in September and then gradually increased to 523 in December.

The full figures are as under :—

January	...	550	July	...	205
February	...	1,046	August	...	126
March	...	2,831	September	...	106
April	...	6,697	October	...	250
May	...	4,292	November	...	428
June	...	850	December	...	523

General measures.—It may be said in general way that the time of the plague staff is roughly divided into three periods.

- (1) During June, July and August, there is very little plague and their time is given to sowing the seed of instruction in the hope that it will bear fruit during ensuing seasons.
- (2) The second period runs from August to March and is devoted to rat destruction in the endeavour to stamp out the beginning of plague.
- (3) In March, April and May when the infection gets beyond control is the time for Inoculation and Evacuation.

These measures have no strictly defined time limits. The periods I have indicated are those in which particular measures are emphasised.

Instruction.—While this is carried on during the whole year, the staff have more time during June, July and August to devote to it.

Great stress is laid on the importance of educating the people in simple sanitation and preparing their minds to accept measures, which, in their suspicious ignorance, they would reject if hurriedly introduced. Theories are carefully explained in the simplest language, that the reasons for our actions may be grasped when we ask them to submit to inoculation or undertake the burden and expense of evacuation or again to supply early information of rat mortality and of human cases.

This instruction takes the form of lectures given by the plague staff, the distribution of pamphlets and the exhibition of lantern slides; and, in order to make themselves more welcome, the plague staff give medicines freely to the sick and do a good deal of minor surgery. The benefits thus conferred are much appreciated as may be gathered from the great increase during the year in the number treated, which I give later on.

Rat destruction.—This is our first line of defence. We endeavour to break this link in the plague chain and the methods employed are traps, phosphorous poison baits (the poison being manufactured by the plague department at their Jullundur Dépôt) and the smoke stove.

The object aimed at is to bring about a sudden, rapid and large diminution of the rat population in certain selected towns and villages. The method of selection is that obtaining in the Punjab for several years, firstly, those places in which plague appeared late in the previous season and which suffered an incomplete epidemic; secondly, those whose plague history for the past ten years showed that plague appeared early and yearly in them; and thirdly, those actually reporting unusual rat mortality or human cases of plague early in the season.

Experience has taught us not to rely on any one method of rat destruction. Systematic trapping is useful when efficiently supervised and we employ it in villages where other measures are not accepted, but to bring about a sudden decimation we have found the smoke stove for rats living in holes on the floor level and poisoned baits for those in the rafters the best methods.

Trapping results at Jhelum for six months prior to smoking operations and for six months after worked out as follows:—

Average daily catch of rats per 100 traps—

For 6 months prior to "smoking"	... 21.15
For 6 months after "smoking" ...	... 1.73

These figures speak for themselves.

We have every reason for believing that we have stamped out plague in some towns and in many villages by our efforts on the above lines and have been the means of preventing its spread to other places. Unfortunately, the credit side cannot be arithmetically stated and is therefore liable to be lost sight of, whereas the debit side is only too apparent. For example, take Jhelum, a town with a population of 12,298. Plague started there in January 1913 and increased in severity till in April there were 119 deaths. Smoking operations were undertaken during the height of the epidemic in order to ascertain whether an epidemic which had once taken firm hold could be curtailed or stamped out. The operations lasted from the 25th March to the 10th May. In May up to the 10th there were 46 deaths, but subsequent to the completion of the operations on that date and to the end of the month there were but 12 deaths before the epidemic ceased, notwithstanding the fact that the plague history of Jhelum in former years indicates that May is usually their worst month.

Many other places where similar good results have been obtained might be quoted did space permit.

Inoculation.—There is no getting away from the fact that inoculation is no more popular with the people than it ever was, but the change of attitude towards it is nevertheless very marked. Not often now does the rustic ascribe

strange and fearful consequences as the direct result of inoculation. Experience has proved to him that these do not follow. But in the absence of a severe epidemic, he is quite prepared to take ordinary risks to avoid the certainty of pain, discomfort and loss of working days which follow inoculation. That is very natural and that it obtains is seen by the number of inoculations performed during the year, 26,419 as compared with 51,570 in the previous year which itself was a mild plague year. But while there were 29,894 deaths in 1912 there were only 17,904 in 1913.

The facilities for inoculation are everywhere to hand. Almost every dispensary, in infected districts, is a potential inoculation station, exclusive of the work of the plague staff.

Evacuation.—The total number of infected villages was 1,108 and of these but 35 villages were totally evacuated and 199 very partially. It requires a severe epidemic to lead to the general adoption of this measure. It is one in which the people have thorough belief and it is only due to the very considerable inconvenience, expense and discomfort they are put to, especially during inclement weather, that it is not more generally resorted to.

Refusal of access.—The right of refusal of access to travellers from an infected area, if they refused to undergo solar disinfection, was carefully explained to the people, but the rights of “bhai-bundi” have made stronger appeals, with the result that access is very seldom denied. Solar disinfection, a simple and effective measure, has also been carefully taught, but being in effect a voluntary measure and implying a little discomfort, it has not caught on and is seldom carried out.

Staff.—The numbers on the plague staff fluctuated during the year; the average numbers were as follows:—

Commissioned Medical Officers	...	...	5
Assistant Surgeons	...	...	19
Sub-Assistant Surgeons	...	...	15

The general medical and surgical relief afforded by the staff increased from 36,940 in 1912 to 84,530 patients in 1913, showing that, as they become better known, the people resort more freely to the plague staff for medical and surgical relief. This aspect of his work has undoubtedly made the plague doctor a much more welcome visitor to villages than he was when he came armed only with an inoculating syringe and good advice. It was the result aimed at.

Twenty-one thousand and ninety-six patients were treated for diseases of the eye and 201 cataract operations were performed, suitable measures being taken for their after treatment.

Attitude.—The attitude of the people to the plague staff was most cordial and the great increase in numbers resorting to them for medical and surgical aid show that they are increasingly appreciated. This attitude enables the plague officer to give good advice with a better chance of it being attended to. Very much good has been done in this way in getting simple sanitary measures carried out.

The attitude of the people towards plague preventive measures varies directly with the severity of the epidemic from apathy to active assistance.

27. Fevers.—Fevers this year accounted for 331,698 deaths at a rate of 17·15 *per mille*. This is somewhat more

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than it has been in the two previous years, about 302,000 in 1911 and 2,75,000 in 1912; speaking generally, it may be said that endemic malaria was present in average amount and that there was no severe epidemic prevalence. As usual, the largest number of deaths occurred in the last quarter of the year, the maximum being recorded in November.

The provincial death rate of 17·15 was exceeded in the districts of Karnal and Ambala where it was 24·80 and 24·43, respectively, Rawalpindi 23·38,

Muzaffargarh 21·95, Mianwali 20·68, Attock 19·86, Gujranwala 19·75, Hoshiarpur 19·03, Rohtak 18·71, Amritsar 18·45, Hissar 18·43, Multan 17·50 and Jhelum 17·25.

28. The urban and rural death rates from fevers were 15·48 and 17·31 compared with 11·95 and 14·44 in the previous year and 19·03 and 20·48 the quinquennial average. The three largest towns in the Punjab, Lahore, Amritsar and Multan, recorded rates of 21·27, 19·00 and 15·41 as against 12·12, 13·84 and 13·12 in the previous year and 18·97, 28·35 and 17·00, the average for the previous five years; it will be observed that in Amritsar the death rate is considerably below that of the quinquennial average, the latter being high on account of the fulminant epidemic of 1903. In Lahore there is very considerable increase compared with 1912, and the quinquennial average is exceeded.

In the case of smaller towns rates as high as 41·19 were recorded in Gohana, 37·22 in Faridabad, 35·94 in Kaithal, 29·49 in Eurya 28·20 in Kot Mithan, 27·10 in Bhakkar and 26·00 in Dinanagar. It is suggested that these towns, particularly Gohana, Kaithal and Faridabad, might receive the attention of the Chief Malaria Medical Officer. They appear worthy of investigation, and it is possible that, if malaria surveys were carried through, measures might be devised to diminish these very high death rates.

29. The highest mortality as usual was recorded among infants under one year of age, the age group 60 and over coming next; then children between one and 5; and next the 50 to 60 age group.

30. **Dysentery and Diarrhoea.**—There were 11,065 deaths from dysentery and diarrhoea accounting for a rate of 0·57 which is 0·06 in excess of the previous year's rate, though 0·07 less than the quinquennial rate.

Rawalpindi accounted for a rate as high as 3·92, while in Hoshiarpur and Attock the rates were as low as 0·06 and 0·03; in the other districts it varied from 0·12 in Montgomery to 1·14 in Simla.

The urban rate was 1·76 and the rural rate 0·46, the corresponding rates for the previous year being 1·61 and 0·40.

31. **Respiratory diseases.**—There were 44,943 deaths due to diseases of the respiratory organs, 2·32 *per mille* as compared with 2·14 in the previous year and 2·33 for the quinquennium. Gurdaspur as usual returned the highest death rate 10·98, Jullundur and Sialkot coming next with 4·66 and 4·64 *per mille*. The lowest rate was recorded in Multan where it was only 0·02, Muzaffargarh following with 0·03; in the others there was the usual variation from 0·46 in Dera Ghazi Khan to 3·20 in Simla.

32. **Injuries.**—Injuries accounted for 6,925 deaths at a rate of 0·36 *per mille*, the corresponding rate for the previous year and the quinquennium being 0·35 each. Of this number 295 (149 males and 146 females) were due to suicide, 579 (444 and 135) to wounds, 4,974 (2,848 and 2,126) to accidents, 885 to snake-bite, 121 to injuries inflicted by wild beasts and 101 to rabies.

33. **All other causes.**—The total number of deaths registered under the head "All other causes" amounted to 126,778 at a rate of 6·56, the corresponding rate for the previous year and the quinquennium being 6·20 and 6·53, respectively. Gurgaon, Karnal, Rohtak, Ludhiana and Amritsar returned rates as high as 12·1, 11·4, 10·6, 10·4 and 9·6, while Gurdaspur, Dera Ghazi Khan and Muzaffargarh returned rates as low as 1·1, 2·5 and 3·0 *per mille*, respectively. The main factor in determining these wide variations, both under this head and for other diseases such as respiratory, was mentioned in last year's report and need not be repeated.

34. **Rabies.**—Altogether 3,984 patients underwent anti-rabic treatment at the Pasteur Institute at Kasauli during the year as against 3,550 in the previous year. Of this number 446 were Europeans and 3,538 Indians. There were 40 deaths, 2 among Europeans and 38 among Indians and one failure among Europeans and 25 among Indians. In addition to the number treated 402 were advised that treatment was not necessary.

Out of the total number treated, 124 Europeans and 842 Indians were Punjab patients ; this is the first occasion on which this information has been supplied.

Section IX.—Sanitary Works.

35. The report of the Sanitary Engineer to Government, Punjab, on sanitary works during 1913 is contained in appendix B to this report.

Sanitary works.

36. Activity in the construction of sanitary works can almost be said to be increasing by geometrical progression. This may be ascribed not only to increased interest in and desire for better things but also to the increased possibilities due to the generous grants made by the Government of India for sanitation. The fact that grants-in-aid are made to deserving cases has encouraged municipal committees to proceed with the preparation of schemes for drainage and water works which a few years ago would have been outside the realm of possibility ; it is to be hoped now that our more important towns will rapidly attain satisfactory sanitary condition : this is very desirable not only for the sake of the towns themselves but because they are centres of traffic and will be important educational object-lessons in sanitation to others than the inhabitants.

Urban sanitation.

The great fault to be found in all towns at present is not so much the want of good water or a good drainage system, but of the recognition of the responsibility of the individual and the proper administration of the Municipal Act. It may truly be said that the sanitary provisions of the Act are a dead letter in the majority of towns. No town can possibly be anything but insanitary, though it may have the most perfect sewage system and the best possible water supply, unless the Act is administered and faults brought home to the individual and corrected, such administration is one of the most potent factors in educational hygiene ; the tendency at present is to pay attention to these problems which can be solved by financial assistance from the outside and to neglect those requiring internal organisation and administration, particularly conservancy and scavenging, the prevention of nuisance, the cleansing and drainage of private compounds and houses, the control of building, the regulation of the food supply and of offensive trades.

37. The comparative healthiness of villages is a well-known fact testified every year by the considerable excess of the urban over the rural death-rate, and, in consequence, the beginnings of sanitary effort are naturally directed particularly to towns ; moreover, the stirring of the sanitary conscience is more evident in towns than in villages and the townsman is becoming better educated as to his hygienic rights ; in towns therefore it is possible to achieve results which could not at present be attempted in villages.

Rural sanitation.

The rural death-rate, however, is high, no matter for surprise to those who are cognisant of the insanitary conditions obtaining in villages generally, and the importance of reducing it has not been lost sight of. Up to the present, however, effort has been confined to encouraging the provision of good water, a considerable amount of well construction, repairing and cleansing being undertaken every year, to the keeping of village sanitary note-books and to the giving of rewards for good sanitary condition.

Rural sanitation has begun to attract more public attention ; it has been the subject of discussion in the Provincial Council, it was considered at the Punjab Sanitary Conference, and a Government resolution will be issued on the subject. It is proposed that a definite beginning shall be made by endeavouring to put certain selected villages in each district in as good sanitary condition as circumstances permit ; such villages will be those of particular importance from their proximity to main roads, to places where fairs are held and to important towns, such position making them particularly dangerous as reception and distributing centres for disease and also particularly appropriate as object lessons to the people.

The district board is the rural sanitary authority and one of the reasons for the want of village sanitation is the absence of a direct connecting link between the village and the district board ; an agency responsible for the regular inspection of villages, rural schools and so on is needed who will report to the board and make recommendations. Until this is supplied little advance can be expected and it is to remedy this fault particularly that I have submitted proposals to Government for the reorganisation of the Sanitary Department.

38. Books were issued to four villages in the Gujranwala District during the year. This is the sum total of new issues. It is doubtful if these books serve any useful purpose at present ; a very small proportion of villages can be visited by the Civil Surgeon or the present Sanitary Department, the use of the books is not understood, they are soon mislaid and lost, and they are usually not forthcoming when called for. District Officers generally testify that the system is useless and the remarks in annual sanitary reports corroborate that opinion. For the selected villages, referred to in the previous paragraphs, these books should prove of value, and also for others if more inspection of villages is provided for.

39. The practice of giving rewards for the encouragement of sanitation in villages has been in vogue for many years. Little, if any, good has resulted, few villages make the effort and those that do usually relapse into original sin once a reward has been received. Cash rewards for the Chenab Colony were discontinued by Government in 1912-13. Rewards this year were offered by the Gurgaon and Ambala district boards, but no village even applied for it. Rewards were also offered by the Ludhiana district board, but have not yet been awarded. Last year no rewards were earned and this year only Rs. 60 were awarded by the Multan district board to lambardars for keeping manure at a distance of 200 yards from the " abadi." There appears to me to be no argument in favour of keeping up this practice and the funds of the rural sanitary authority would be better expended in assisting specific schemes.

40. During the year 9,582 wells were cleaned and 1,275 parapets constructed at a total cost of Rs. 88,582. This shows a great increase in the amount spent as compared with the previous year.

41. The income derived from the sale of street sweepings in municipal towns during the year under report amounted to Rs. 1,22,446, some Rs. 30,000 less than that realized in the previous year and about Rs. 23,000 less than that in 1911. The largest sums were realized in Amritsar, Lahore, Multan and Ludhiana.

42. In the principal towns there were 1,518·95 acres of land under sewerage irrigation and Rs. 26,521 were realized for its use during the year, an increase of 223·87 acres.

43. List of works of public utility constructed during 1913 by private individuals at their own expense :—

AMBALA DIVISION—*Hissar District*.—A pucca kund in village Lilas at a cost of Rs. 2,200 by Talu, Bishusi, of village Lilas. An additional boarding-house to the High School, Bhiwani, at a cost of Rs. 3,000 by Lala Jagan Nath.

Rohtak District.—A platform to the well on Balab road at a cost of Rs. 1,200 by Mohan, son of Bakhshi, Jat, of Balab. A pucca well on Bali Katwal and Moi road at a cost of Rs. 1,500 by Amar Singh, son of Har Narain, Brahman, of Bali.

Gurgaon District.—One Tibari, Chhatri, Dharmsala, well with water trough and a kotha in village Budana, Tahsil Rewari, at a cost of Rs. 2,200 by Mam Chand, son of Daya Kishen, Jat, of mauza Budana.

Ambala District.—A pucca well and musafarkhana at Dulheri Jattan at a cost of Rs. 1,300 by Molak, son of Baru, of Mani Mazra. Pucca dharmsala at Ambala city at a cost of Rs. 5,000 by Gobind Lal, son of Jamna Das, Bania, of Chaur Mastpur, present address Ambala city.

JULLUNDUR DIVISION—Kangra District.—A dharmsala of pucca masonry at Dehra on the Dharamsala-Hoshiarpur road at a cost of Rs. 45,000 by Hira Mal, son of Faturi, Sud, of Dehra. Three atialas and two baolies of pucca masonry in village Garli at a cost of Rs. 2,400 by Lachhman Das, son of Rupa Mal, and Mehr Chand, son of Bhika Mal, Tahsil Dehra. Two baolis on the road near Sujanpur Tirah at a cost of Rs. 1,550 by Mussammat Gangi, widow of Ganga Ram, Kalal, of Simla. A katcha serai on road near Chetru Bridge at a cost of Rs. 1,200 by Sohnu, son of Maya, Mahajan, of Dhugwar, Tahsil Kangra.

Hoshiarpur District.—A pucca well in village Bharowal on road leading to Jajon at a cost of Rs. 2,000 by Mussammat Jowali, daughter of Gopala, Ahluwalia, of Bharowal, Tahsil Garhshankar. A pucca well and a house in village Muhammaduwal on a path leading from Mahilpur to Maili at a cost of Rs. 1,600 by Gainda Singh, son of Sahiba, Jat, of Muhammaduwal, Tahsil Garhshankar. A pucca well and a house in village Thomana on Mahilpur-Phagwara road, at a cost of Rs. 1,400 by Mussammat Raj Kaur, widow of Khem Singh, Jat, of Thomana, Tahsil Garhshankar. A female ward for Hariana dispensary at a cost of Rs. 1,350 by Lala Chuni Lal, retired District Judge, Hariana. A pucca operating room for Anandpur dispensary at a cost of Rs. 1,100 by Tikka Ram Narain Singh, Honorary Magistrate, Anandpur.

Ferozepore District.—One dharmsala at Guru Har Sahai at a cost of Rs. 3,000 by Bhagwan Devi, widow of Guru Autar Singh, Sodhi, of Guru Har Sahai. A building for Anglo-Sanskrit School at Dharmkot at a cost of Rs. 11,300 by Lala Parbh Dyal, Nauhria Arjan Das and Bhagat Ram of Dharmkot. A cottage for Sadhus at Zira with a well at a cost of Rs. 7,000 by Lala Malla Mal, Bania, of Zira. A well and a kotha on road side at Alipur at a cost of Rs. 1,200 by Lala Malla Mal, Bania, of Zira. A building for a primary school at Sayyanwala at a cost of Rs. 1,600 by Bhai Isher Singh, Zaildar, Sayyanwala, District Ferozepore. A diggi, a kotha and a verandah for travellers at Abohar at a cost of Rs. 2,700 by Lala Ramji Das, son of Lala Ram Sukh Das, Bania, of Abohar. A well at Abohar for drinking purposes at a cost of Rs. 2,500 by Nathu Ram, Brahman of Abohar. A well at Data at a cost of Rs. 1,200 by Lala Tulsi Ram, son of Sobha Ram, Khatri, of Data, tahsil Zira.

LAHORE DIVISION—Amritsar District.—A dharmsala or sarai in Katra Ram, Gharya, Amritsar, at a cost of Rs. 20,000, by Bhai Mahna Singh, Municipal Commissioner, Amritsar.

Sialkot District.—A pucca well with a musafarkhana near Badiana at a cost of Rs. 2,500 by Haveli Shah, son of Jawahir Shah, caste Khatri, of Badiana.

RAWALPINDI DIVISION—Shahpur District.—A pucca drinking well on the Khushab-Sakesar road at a cost of Rs. 1,200 by B. Sham Das, son of Lala Lal Chand, caste Arora, of village Khura, Tahsil Khushab.

MULTAN DIVISION—Dera Ghazi Khan.—Donation of Rs. 2,000 for a building for Nagri Girls' School, Rajanpur, by the widow of Lala Bacha Ram, late Deputy Record-keeper Rajanpur.

Section X.

44. I think it may be said without exaggeration that the year has been one of special activity and effort, and that the demands made on the Sanitary Department have steadily increased in number and importance. Government has recognised the necessity of meeting these demands and has appointed a second Deputy Sanitary Commissioner; it has also been decided that, in addition to the cities of Lahore and Amritsar, the five towns next in importance, Multan, Rawalpindi, Sialkot, Jullundur and Ludhiana are to be provided with Health Officers and that the health departments of all the more

General.

important municipalities are to be strengthened by insisting on the appointment of a certain minimum number of properly qualified sanitary inspectors. The fact that such measures have been found necessary alone emphasises the rapid advance that is toward in matters relating to the public health, and this is confirmed by the large increase in the number of sanitary works under consideration and construction in towns and the proposed advance into rural areas referred to in the previous section.

45. The most memorable event of the year 1913 has been the Punjab Sanitary Conference, which assembled in August. It was convened to consider particularly the resolutions of the All-India Sanitary Conferences with the object of deciding how far and in what manner the desired ends could be attained in the Punjab, and consequently it was particularly a meeting of the more senior and experienced executive officers, all the Commissioners of Divisions and many Deputy Commissioners being present, rather than a meeting of public health officers to discuss technical problems. The field of discussion was a very wide one and resolutions were passed on many matters of primary importance. Of the more important matters dealt with in these resolutions, rural sanitation, the provision of health officers and sanitary inspectors, and town planning and housing will each be dealt with in a Government resolution early next year; among other things the problem of school hygiene and the inspection of children will also be taken up and also the question of improved methods of dealing with epidemic cholera.

46. The office of Sanitary Commissioner was held by Lieutenant-Colonel E. Wilkinson, F.R.C.S., I.M.S., from the 1st of January to 12th February and from that date till the end of the year by Lieutenant Colonel S. Browning Smith, I.M.S.

The appointment of Deputy Sanitary Commissioner was held by Captain H. G. Stiles Webb, I.M.S., from the commencement of the year to 17th March 1913 and thereafter by Captain R. T. Wells, I.M.S., till 6th October 1913, when he was relieved by Major E. L. Perry, I.M.S., the permanent incumbent, who remained in charge till the end of the year.

An addition to the superior appointments of the Sanitary Department was sanctioned during the year and a second Deputy Sanitary Commissionership created; Dr. Diwan Jai Chand, D.P.H., D.T.M., L.R.C.P., etc., was selected for the post and has been engaged temporarily for a period of one year from 16th October 1913, the date on which he assumed charge.

47. About the beginning of January Colonel Wilkinson visited Kalka in connection with the water-supply scheme and Multan in connection with the water and the intra-mural drainage schemes and towards the end of the month he inspected Amritsar.

I took over charge of the office of Sanitary Commissioner on the 12th of February; I made a sanitary inspection of the towns of Jullundar, Lyallpur, Gujrat, Lalamusa, Jalalpur and Batala in March.

In April, I visited Sargodha, Jhang-Maghiana, Bhera and Simla. Early in May I visited the Punjab Vaccine Institute at Murree, and shortly after I proceeded to Simla by road through Kangra and Kulu inspecting vaccination.

Major Cowin, I.M.S., Medical Advisor to the Patiala State, and I, as members of the Scientific Advisory Committee of the King Edward Sanatorium of Dharmpur, inspected this institution on three occasions, once in April and twice in June and submitted a report thereon to the Inspector-General of Civil Hospitals, Punjab, for the information of Government and to the Secretary of the Institute for the information of his Society.

In June I inspected the upper and lower lines of the present Simla water-supply, and the filter beds and pumping stations and also the works and catchment area of the new water-supply extension scheme at Chair.

In August the Punjab Sanitary Conference was held which I attended : and to which I furnished several notes on various subjects with which the Conference had to deal. Another subject which engaged attention in the summer was the Simla water-supply extension at Chair, and a committee of both Government of India and Punjab Government representatives was convened to consider the question of acquiring the catchment area, and meetings of this committee were held in August and September. In September I visited the Lawrence Military Asylum at Sanawar and submitted a report to Government.

I made a second sanitary inspection of Simla towards the end of September and beginning of October, and at the beginning of the latter month I returned to Lahore *via* Karnal and Rohtak making sanitary inspections of those towns. Towards the end of October I visited Ferozepore and in the beginning of November, Rawalpindi and Jhelum, and about the middle of the same month Gujranwala, Sialkot and Wazirabad. I inspected Multan early in December and later the towns of Ludhiana and Phillaur.

48. In October the Sanitary Commissioner was again appointed Professor of Hygiene at the Lahore Medical College, and the first Deputy Sanitary Commissioner, Assistant Professor. The course was commenced about the middle of November, and I delivered lectures to the third year students of the College in November and December.

49. During the first quarter of the year Captain Stiles Webb made inspections of vaccination and birth and death registration in the Ferozepore, Ambala and Attock Districts and in Kalsia State. In April, Captain R. T. Wells inspected vaccination, and the general sanitary arrangements of the Baisakhi fair at Sakhi Sarwar (Dera Ghazi Khan), and investigated the alleged occurrence of cases of small pox among vaccinated children in the Dera Ghazi Khan District; in May he investigated the outbreak of epidemic cholera which broke out in the Kasur Tahsil of the Lahore District, and in June he inspected vaccination in the Khanati State and the Kot Khai Tahsil of the Simla District. In August he was engaged in fighting the severe epidemic of cholera which broke out in Sialkot city and also in the Chunian and Raewind thanas of the Lahore District; in September he continued on cholera duty in Sialkot city, after which he inspected vaccination and registration of births and deaths in Keonthal, Rampur, Bashahr, Jubbal, Darkoti, Theog, Balsan and Ghund States in the Simla District. Major Perry delivered lectures to the sanitary inspectors class up to the end of the year.

50. Dr. Diwan Jai Chand, the Additional Deputy Sanitary Commissioner, visited and reported on the sanitary condition of the town of Kamalia, Shujabad, Chiniot, Jampur, Rajanpur and Dajal; he also inspected vaccination and vital statistics in 180 villages and supervised the sanitary arrangements at the Nankana Sahib and Baba Farid Fairs.

51. One hundred and forty-nine inspections of towns and 2,84 of villages were made by the Civil Surgeons during the year under report as against 187 of towns and 4,103 of villages in 1912, while every allowance must be made for the gradually increasing demands made on the time of Civil Surgeons, the decrease in inspection work is large, and the attention of officers will be drawn to the importance of this work. Assistant Surgeons inspected 42 towns and 1,145 villages as compared with 20 towns and 105 villages in the previous year.

52. No new towns were formed in the vicinity of the North-Western Railway Stations during the year 1913, but at Warburton Station on the Lyallpur district and Kabula on the Sutlej Valley Railway mandies are being built, which will probably form villages in the course of time; at Nakband on the Rawalpindi district some merchants have lately started building huts about 100 feet beyond the Railway boundary.

53. It is estimated that about sixty thousand persons collected at the fairs of Choa Saidan Shah and Katas Raj, most of them arriving between the

Large fairs.

4th and 12th of April. Admission was by ticket, and a small charge was recovered for defraying sanitation and other expenses; the fair at Choa ended a day before the Katas fair. The Assistant Surgeon at Pind Dadan Khan was placed in medical and sanitary charge of both these fairs and the Civil Surgeon, Jhelum, inspected the arrangements on April 10th; these were adequate and the result satisfactory to all concerned. The water-supply at Katas has been improved. The fair at Gullu Shah in the Sialkot District, which would have taken place in September, was stopped as cholera was present in the Sialkot and adjacent districts at that time; the question of providing a good water-supply for this fair is under consideration. The Nankana Sahib fair, in the Gujranwala District, was held on November 13th and the Additional Deputy Sanitary Commissioner, Punjab, was deputed to help the Civil Surgeon of the district in supervising the sanitary arrangements. More than 50,000 pilgrims attended the fair, 45,985 coming by rail and 5,000 to 10,000 by road. Inspection posts were established for the detection of infectious cases. The Civil Surgeon and the Additional Deputy Sanitary Commissioner were both present, all the usual precautions were taken and no untoward incident occurred.

The sanitary arrangements for the Baba Farid fair on the 5th and 6th December 1913, held at Pakpattan in the Montgomery District, were entrusted to the Additional Deputy Sanitary Commissioner, Punjab, as the Civil Surgeon of the district is unable to leave his head-quarters being Superintendent of the Central Jail there. The attendance at this fair was estimated to be about 35,000 persons. On December 4th a house collapsed, and out of the eleven occupants three escaped unhurt, seven were killed and one unearthed alive who was treated successfully by Dr. Diwan Jai Chand. As far as could be ascertained no case of infectious or contagious disease occurred during the fair.

54. The necessity of providing properly trained and qualified sanitary inspectors had to be foreseen and a six months' course of training was arranged

Sanitary Inspectors.

for to enable Punjab men to qualify for these posts. The course is intended to be as practical as possible and includes lectures and demonstrations on general hygiene by the Deputy Sanitary Commissioner, on minor Sanitary Engineering by the Personal Assistant to the Sanitary Engineer and on municipal hygiene and the Punjab Municipal Act by the Health Officer, Lahore, including a period of actual working with the Lahore Sanitary Inspectors. The examining board will consist of the Sanitary Commissioner, the Sanitary Engineer and the Health Officer, Lahore.

55. The Pasteur Institute at Kasauli as the Provincial Laboratory of the Punjab reported on the specimens noted below.—

Work of the Provincial Laboratory.

Serum diagnosis of typhoid fever	...	...	193
Do. do. paratyphoid	...	...	99
Do. do. Malta fever	...	...	110
Examination of blood for malaria	...	...	147
Do. sputum for tubercle	...	...	39
Do. tumours	...	...	217
Do. water	...	...	32
Miscellaneous tests	...	...	66
Examination of brain for negri bodies	...	...	144
Vaccine and tuberculin sent out	...	...	72
			<hr/> 1,029 <hr/>

56. With the increase of work of the sanitary department, there has naturally been a correlative increase in that of my office, and during the year a very considerable amount of fresh correspondence and work has been added by the institution of the sanitary inspectors class and the new office of additional Deputy Sanitary Commissioner. The statistical branch is particularly hard pressed, the monthly return alone requiring 1040 calculations to two places of decimals of the monthly number of deaths from each disease in each locality expressed in terms of an annual death rate. I am glad to acknowledge the loyal services of the office which has rendered possible the prompt submission of the numerous returns and the speedy disposal of cases. An extra clerk was sanctioned for the office during the year on the pay of Rs. 30 per mensem.

S. BROWNING SMITH, LIEUT.-COL., I.M.S.,

Offg. Sanitary Commissioner, Punjab.

APPENDIX A.

PROCEEDINGS OF THE SANITARY BOARD, PUNJAB.

The constitution of the Board was the same as in 1912, except that I held charge of the office of Secretary from the afternoon of the 12th February 1913, when Lieutenant-Colonel E. Wilkinson, F. R. C. S., I. M. S., proceeded on leave.

The Sanitary Board met 4 times during the year, twice in Lahore and twice in Simla.

Out of the balance Rs. 83,741 of the grant of a lakh and-a-half placed at the disposal of the Board for distribution to municipalities and district boards as grants-in-aid for sanitary works during 1912-13, the following grants were made between 1st January and 31st March 1913; Rs. 39,336 remained unexpended at the end of the financial year and lapsed to Government :—

			Rs.
Isa Khel water-supply	...	...	20,750
Hissar, drainage of Ahir Mohallah	...	...	1,000
Hansi, filling of depressions	...	...	1,500
Bhiwani, filling depressions and acquiring land	...	...	4,500
Sialkot, drainage	...	...	9,700
Zira, drainage	...	...	3,000
Toba Tek Singh. water-supply	...	...	3,955
Total	...	...	44,405

A fresh grant of a lakh-and-a-half was placed as usual at the disposal of the Sanitary Board during 1913-14, of this the following grants were made up to 31st December 1913 leaving a balance of Rs. 929-8-0 which will be accounted for in next year's report.

			Rs.	A.	P.
Kasur, drainage works	...	...	8,748	8	0
Gojra, water-supply	...	...	29,636	0	0
Chiniot, drainage	...	...	6,048	0	0
Muzaffargarh, drainage	...	...	4,500	0	0
Experimental and printing works	...	...	2,700	0	0
Amritsar conservancy tram line	...	..	17,000	0	0
Chiniot Road water-supply (Chak Jhumra)	...	...	1,212	0	0
Murree bazaar drainage	...	...	2,000	0	0
Amritsar, water works	...	...	11,000	0	0
Maghiana, Gaur Nallah drainage	...	...	14,884	0	0
Jandiala filling depressions	...	...	12,391	0	0
Gurdaspur drainage, Public Works Department charges.	...	...	2,540	0	0
Hoshiarpur, sanitary works	...	...	9,000	0	0
Batala, drainage	...	...	6,000	0	0
Hansi, filling Lal Digi	...	...	5,260	0	0
Pathankot, drainage	...	...	10,000	0	0
Shujabad, drainage	...	...	6,151	0	0
Total	...	...	1,49,070	8	0

In addition to the grants made by the Board during the year 1913, the following grants were sanctioned by Government :—

			Rs.
Ambala, water works	...	...	30,000
Amritsar, sewerage scheme	...	...	2,20,000
Sialkot, water works	...	...	1,00,000
Rawalpindi, drainage	...	...	1,50,000
Isakhel, water-supply	...	...	5,000
Lahore, sewerage scheme	...	...	9,00,000

The grants of Rs. 7,114 and 2,227 recommended for drainage and pavements of Nawakot and for Kharkhada and Hassangarh are still under the consideration of Government.

A grant of Rs. 8,000 recommended for the Nurpur water supply was refused but Government agreed to give Rs. 3,000 provided that the municipality contributes the rest of the cost of the scheme; a reply is awaited.

The schemes noted below were approved by the Sanitary Board and submitted to the Local Government for administrative sanction; this was accorded in each case except the Shujabad drainage and Nurpur water-supply schemes.

Revised administrative sanction to the Tandlianwalla drainage scheme at an estimated cost of Rs. 73,509 is still awaited from Government :—

	Rs.
Isa Khel, water-supply	37,348
Lowering the engines and suction main at Handesra	38,703
Kasur, Kot Fateh Khan and Kot Azam Khan drainage.	17,497
Multan, water-works	3,56,320
Multan, drainage	2,75,000
Maghiana, Gaur Nallah drainage	14,884
Amritsar, conservancy tram line	55,000
Shujabad, drainage	15,302
Jandiala, filling depressions	21,008
Pathankot, drainage	10,220
Bhera, drainage... ..	67,000
Lahore, sewerage scheme	15,61,800
Nurpur, water-supply	17,657
Ferozepore, drainage	24,016

Administrative sanction was also accorded to the Amritsar city sewerage scheme at an estimated cost of Rs. 2,20,520.

Government in the Public Works Department accorded technical sanction to the schemes noted below which had previously received the approval of the board :—

	Rs.
Isa Khel, water-supply	45,300
Jaranwala, water-supply extension	49,807
Gaur Nallah, drainage	14,884
Sialkot, water-supply	4,59,357
Chiniot Road, water-supply	22,027

The question of increasing the annual grant placed at the disposal of the Sanitary Board, for distribution to local bodies as grants-in-aid for sanitary works is under the consideration of the Government.

APPENDIX B.

ANNUAL REPORT OF THE SANITARY ENGINEER TO GOVERNMENT,
PUNJAB, FOR THE YEAR 1913.

THE post of the Sanitary Engineer to Government, Punjab, was held during the year under report by—

- (1) Mr. A. S. Montgomery, from 1st January to 19th March and again from 24th October to 31st December.
- (2) Mr. Amar Nath Nanda, Temporary Engineer, for two days, *viz.*, the 20th and 21st March.
- (3) Mr. D. W. Aikman, from 22nd March to 23rd October.

2. *Simla*.—The most important sanitary scheme under construction, *viz.*, the Chair Water-Supply Extension (estimated cost Rs. 5,75,587), together with a further extension, which was subsequently sanctioned at an estimated cost of Rs. 16,300 for laying mains for the supply of water to “The Retreat” and “Mashobra Bazar” has now approached completion. The supply of water from this source will be only in part available during the ensuing dry season owing to the outstanding question of final filtration. The Rising Mains had not been tested before the close of the year. The question of final filtration at Dhali of water from the Chair catchment area is still outstanding, and this fact precludes the possibility of full use being made of the pumping plant. It is hoped that final orders will soon be passed on this vexed question. The pumps installed at Chair by Messrs Simpson and Co. have passed their official tests most satisfactorily, and their efficiency has exceeded the guarantee, and are in every way a very fine piece of work. The second jewel filter at Chair has yet to be installed after the one already erected has undergone satisfactory tests. In addition to the various other works of small extensions and improvements, which have been carried out at Simla or are in hand by the Municipal Committee, the extension of sewage mains (estimated cost Rs. 61,000 odd) under execution by the Municipal Engineer has made considerable progress during the year, nearly two-thirds of the work having been completed.

The usual half yearly inspections of the water-supply and sanitary arrangements of the Viceregal Lodge Estate were made by the Sanitary Engineer during the year.

3. *Delhi*.—The sewage disposal works attached to the Sanitary Scheme provided at the Viceregal Lodge, Delhi, in the year of 1912 having proved inadequate to deal with the greatly increased flow of sewage there, certain necessary additions, such as enlargement of septic tanks, provision of new filters and alterations to some of the main pipes, were carried out at a cost of Rs. 26,000. This extension similarly to the original scheme was carried out by the Punjab Public Works Department under the advice of the Sanitary Engineer, though Delhi no longer forms a portion of this Province. The whole system is now working satisfactorily.

4. *Amritsar*.—At the suggestion of the Sanitary Engineer, Messrs. Lane Brown and Hewlett, Consulting Engineers of Lucknow, worked out for the municipal committee a detailed scheme amounting to Rs. 2,22,000 for an underground sewerage system for a part (Dhab Khatikan and Bazar Hari Singh) of the city. It has been scrutinized and approved by the Sanitary Engineer, and is now under consideration by the Municipal committee. Good progress is being made with the work of “Dhab filling” for which an estimate for Rs. 1½ lakhs was sanctioned during 1911. The work is expected to be completed in the course of a few months. The disposal works which were completed and opened during 1912 are in regular work and are proving both satisfactory and remunerative. A duplicate set of oil engine and pump has been installed there to allow of a stand-bye plant in case of break-down.

5. *Lahore*.—The important scheme for the underground water-borne sewerage system of Lahore city and civil station has been administratively sanctioned for 15½ lakhs and a most liberal grant-in-aid of 9 lakhs has been given by the Local Government. The detailed estimate, which includes underground sewers, pail depôts and water flushed latrines, is under preparation by the Municipal Engineer, the rough project having been scrutinized and approved of by the Sanitary Engineer.

Several new drains and water mains were and are being laid in different localities at an aggregating estimated cost of Rs. 60,000, an important one of these extensions being the water main laid in the Empress Road, the estimated cost of which is Rs. 21,000.

6. *Ambala*.—Strainer tubes have now been sunk in all but 11 of the water-supply wells at Handesra with a view to improving their yield. In these remaining wells it is now proposed to sink Ashford tubes, for which an estimate for Rs. 8,989 has been approved by the Sanitary Engineer. The result of the insertion of these strainers in the wells has proved very fairly satisfactory, yield of the wells having in most cases been improved thereby.

The work of lowering engine and suction mains at Handesra (estimated cost Rs. 38,703), the necessity of which arose from the fall of spring level and which was put in hand in 1912, made considerable progress, and has nearly approached completion, and it is now hoped that this improvement, coupled with the insertion of the strainers, will give Ambala sufficient water for many years to come.

7. *Rawalpindi*.—The intramural drainage scheme, an estimate for which amounting to Rs. 1,69,397 was sanctioned in 1912, made very good progress during the year, the total expenditure incurred up to the close of the year was Rs. 1,34,200.

8. *Sialkot*.—An estimate amounting to Rs. 4,59,357 for the water-supply scheme for this town was sanctioned and a special sub-division to carry out the work formed, with Mr. E.S. Heard, Assistant Engineer, in charge, under the direct supervision of the Sanitary Engineer. The work was put in hand in November 1913. A good start was, however, made with the works. The staff quarters are now nearing completion and the service reservoir and sinking wells are well in hand, and the pipes and machinery for which indents were prepared and submitted by this office are awaited from Home.

9. *Dharmasala*.—The actual construction of work on the combined water-supply scheme for the Cantonment and Municipal Committee for Upper Dharmasala, the estimated cost of which is Rs. 31,586, has not yet been put in hand owing to the fact that funds for the Military share have not been provided, but Rs. 17,000 have been expended on the supply of pipes, etc., from England. The extension of the water-supply for Lower Dharmasala for supplying water to public buildings is well in hand, and only a small portion of work remains to be done. The work was sanctioned in 1909 at an estimated cost of Rs. 20,688. The slow progress is due to the fact that buildings for which the supply was intended had to be first built.

10. *Gurdaspur*.—The drainage scheme sanctioned for this town towards the close of 1912 at an estimated cost of Rs. 18,134 is well in hand. Two-thirds of the work has been done. It could not be completed owing to a change in the sanctioned alignment having to be considered.

11. *Lyallpur*.—The work of constructing a new water tower and raising the old one (estimated cost Rs. 14,872) is nearly completed. To meet the growing demand of water an extension to the water-supply is under contemplation. The extension has been roughly estimated to cost Rs. 1,14,000.

12. *Toba Tek Singh in Lyallpur District*.—An estimate amounting to Rs. 33,255 for the extension of the water-supply was sanctioned and the work put in hand. Considerable progress was made with the work during the year.

13. *Jaranwala in Lyallpur District*.—The water-supply extension scheme has been completed at a total cost of Rs. 53,577, and the system is working satisfactorily.

14. *Gojra in Lyallpur District*.—An extension to the water-supply was sanctioned for Rs. 59,636 in 1912. The work is being carried out by the District Board. The work is well advanced.

15. *Tandlianwala in Lyallpur District*.—The town is being provided with a complete surface drainage system on modern lines. The work (estimated cost Rs. 61,059) was put in hand and made good progress during the year.

16. *Gujranwala*.—The Municipal Committee being anxious to have a regular water-supply system provided for their town has asked that a rough estimate be worked out for them for the purpose of administrative sanction.

The survey of the town and boring experiments to ascertain the nature of the sub-soil are in hand.

17. *Chuharkana in Gujranwala District*.—The work on the drainage scheme for which an estimate was sanctioned in 1912 for Rs. 26,891 was completed during the year.

18. *Chiniot in Jhang District*.—An estimate for Rs. 59,783 for a drainage scheme for this town was sanctioned as long ago as 1908, work, however, could not be commenced till February 1913 for want of funds. It has now made very good progress during the year.

19. *Isa Khel in Mianwali District*.—An estimate for Rs. 45,300 was sanctioned for a water-supply scheme and the work was started. Owing to the fact that the water at the site where it was proposed to sink tubes was found to be brackish the scheme has unfortunately had to be held in abeyance till further test borings have been made. These test borings (including a deep boring) are now in hand, and it is hoped to shortly arrive at a definite conclusion, the best source whence potable water can be obtained.

20. *Dera Ghazi Khan*.—Both the drinking water-supply and irrigation water-supply schemes were completed during the year at a cost of Rs. 47,126 and Rs. 15,472, respectively. Proposals are in progress for the extension of the schemes, the allowance of water having proved utterly inadequate. A comprehensive drainage scheme has also been asked for and will be worked out in due course.

21. *Fazilka in Ferozepore District*.—Work on the drainage scheme (estimated cost Rs. 70,000) was completed during the year, the work having been satisfactorily carried out by the municipal committee staff.

22. In connection with the source of supply of water from tube wells, the demand of which is becoming increasingly common, tests on the relative merits of certain tubes have been under the observation of the Sanitary Engineer during the past year.

Valuable data are being collected, and later, and more especially when the result of pumping on the tubes at Sialkot for the water-supply, has been under observation for some time, it is hoped to be able to pronounce fairly confidently in most cases what is the best form of strainer to use and whether the subsoil whence the supply is to be derived will prove suitable. Sanitary Engineer is also collecting information about the best methods of conducting boring operations, and the most efficient mode of extracting water for test purposes from the bore holes, and he intends to approach Government with a view to the entertainment of a foreman borer and staff.

22. Various sanitary works in the Province under construction and those recently completed were inspected either by the Sanitary Engineer or his Personal Assistant, and inspection notes were written and sent to those concerned. Many other places were visited by the Sanitary Engineer himself and his Personal Assistant in connection with the investigation of projects for water supplies and drainage.

24. Thirteen estimates aggregating Rs. 7,64,816 were sanctioned by the Local Government in the Public Works Department in addition to that for Rs. 23,317 for the addition and alterations to the sanitary installation at Delhi Viceregal Lodge. The estimates, both rough and fair, which were scrutinized and finally approved by the Sanitary Engineer are 31 in number, the total of which aggregates Rs. 19,19,000.

The detailed estimates which were prepared or recast in the office of the Sanitary Engineer are 7 in number with a total amount of Rs. 1,66,794. The number of the rough projects which are prepared by the Sanitary Engineer for purpose of administrative sanction is 12, and their total amount is Rs. 9,49,000.

25. The accompanying statement shows the water pumped at the various water-works in the Province together with the cost of pumping.

A. S. MONTGOMERY,

Sanitary Engineer, to Government Punjab.

STATEMENT A.

STATEMENT OF WATER PUMPED AND USED IN THE WATER WORKS STATIONS,—SIMLA, LAHORE, AMBALA, AMRITSAR, SARGODHA, LYALLPUR AND LUDHIANA—AND COST OF PUMPING.

No.	Name of station.	Population served according to last census.	WATER USED		Daily consumption per head in Gallons, average of the year.	WATER PUMPED		FUEL USED		Cost.				Lift including friction head.	Cost of 100,000 gallons pumped.	REMARKS.
			During the year.	Daily average.		During the year.	In the three hot months, April to June.	Description.	Quantity.	Value of fuel.	Value of stores.	Establishment.	Total.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			Gallons.	Gallons.		Gallons.	Gallons.		Mds.	Rs.	Rs.	Rs.	Rs.	Feet.	Rs. A. P	
1	Simla	30,316	118,139,915	323,671	10.6	57,840,893	22,733,811	Wood	32,533	26,040	4,174	10,394	40,608	1,300	70 3 0	
							Coal	Coal	Tons. 10,542							
2	Lahore	208,126	937,618,795	2,568,818	About 12.34	937,618,795	249,702,430	Coal	800	12,481	2,798	7,416	22,695	120	2 0 0	
3	Ambala	24,491	92,722,519	2,540,343	10.372	92,722,519	24,203,571	Steam coal	Mds. 6,718	5,520	2,636	4,452	12,608	70	13 9 6	
4	Amritsar	140,697	480,967,919	1,317,720	9.365	480,967,919	135,130,834	Bengal coal.	15,228	10,215	1,562	6,075	17,852	60	3 11 5	NOTE.—Lift is only approximate because as tube wells were installed, the well head decreased from 7' to 5'; on the other hand friction head increased owing to increased supply.
5	Sargodha	8,849	24,038,251	65,858	7.44	24,038,251	6,192,473	Steam coal	Tons. 3,707	2,388	800*	2,162	5,450	83	22 10 8	
6	Lyallpur	19,578	63,124,120	172,943	8.8	63,124,120	16,451,430	Coal	Mds. 2,246	1,419	616	6,384	8,419	54	13 4 10	* Includes cost of water paid to Irrigation Department.
7	Ludhiana	44,170	159,134,814	435,985	9.8	195,134,814	33,064,151	Coal and wood...	Tons 278	4,751	1,419	5,743	11,913	95	7 7 0	

APPENDIX C.

Statement showing the death rates from cholera, small-pox, fevers and dysentery and diarrhoea for the five years preceding and for the period since the introduction of drainage or water-supply or both in the undermentioned towns :—

Towns.			DATE OF COMPLETION OF WORKS OF		AVERAGE ANNUAL DEATH RATE SINCE THE INTRODUCTION OF DRAINAGE OR WATER-SUPPLY OR BOTH.				AVERAGE ANNUAL DEATH RATE FOR THE FIVE YEARS' PERIOD PRECEDING THE INTRODUCTION OF DRAINAGE OR WATER-SUPPLY OR BOTH.				REMARKS.
			Drainage.	Water-supply.	Cholera,	Small-pox.	Fevers.	Dysentery and diarrhoea.	Cholera.	Small-pox.	Fevers.	Dysentery and diarrhoea.	
1			2	3	4	5	6	7	8	9	10	11	12
Ambala	...	..	...	1895	0·3	0·5	12·1	3·6	0·5	0·4	19·3	6·4	
Simla	...	...	1893	1893	0·02	0·5	13·5	0·8	...	1·1	17·1	1·4	
Ludhiana	...	...	1895	1909	0·3	0·9	15·6	1·4	0·4	2·7	20·8	1·6	
Jagraon	...	...	1907	...	0·2	2·1	11·5	1·3	0·6	1·5	9·3	2·0	
Ferozepore	...	...	1908	...	0·3	1·0	11·7	1·2	0·3	1·1	25·4	1·1	
Zira	...	...	1913	...	...	2·3	11·9	0·2	0·3	4·0	16·6	0·9	
Fazilka	...	...	1913	...	0·2	1·5	10·8	1·3	2·2	2·6	21·4	1·7	
Lahore	...	...	...	1881	0·8	0·8	16·5	1·6	1·9	1·6	27·8	2·3	
Amritsar	...	...	...	1904	0·4	1·6	23·7	2·0	0·4	0·7	31·3	1·8	
Dalhousie	...	...	...	1894	0·1	0·1	12·5	2·1	...	...	9·6	2·4	
Gujranwala	...	...	1892	...	0·5	0·7	16·1	1·2	0·5	0·6	19·7	1·7	
Jhelum	...	...	1908	...	0·1	0·7	10·4	1·8	1·5	0·3	14·0	2·1	
Pind Dadan Khan	...	...	1909	1909	0·1	1·6	19·1	3·4	1·1	0·7	23·1	3·6	
Gujrat	...	...	1906	...	1·4	0·5	18·3	1·9	0·3	0·2	16·9	1·9	
Rawalpindi	...	...	1907	1887	0·6	0·4	19·6	2·3	0·5	0·1	16·4	3·4	
Murree	...	...	...	1894	0·1	0·1	16·8	1·7	0·7	0·4	14·8	0·9	
Mianwali	...	...	...	1904	0·3	0·9	20·9	2·4	Not available.				
Lyallpur	...	...	1904	1904	0·1	0·8	12·4	0·8	*2·8	0·4	16·3	2·1	
Multan	...	...	1907	...	0·1	1·1	18·3	2·3	0·01	1·9	16·9	2·4	
Dera Ghazi Khan	...	...	...	1913	...	2·3	28·2	...	2·0	0·6	15·9	1·3	
Kalka	...	...	...	1890	0·4	0·1	13·7	2·1	1·7	0·2	15·2	3·9	

*Figures available for four years only.

ANNUAL FORM No. I.

STATEMENT SHOWING THE BIRTHS REGISTERED IN THE DISTRICTS OF THE PUNJAB
DURING THE YEAR 1913.

1	2	3			4			5			6	7	8	9			10
		POPULATION ACCORDING TO CENSUS OF 1911.*			NUMBER OF BIRTHS REGISTERED.			RATIO OF BIRTHS PER 1,000 OF POPULATION			Number of males born to every 100 females born.	Excess of births over deaths per 1,000 of population.	Excess of deaths over births per 1,000 of population.	MEAN RATIO OF BIRTHS PER 1,000 DURING PREVIOUS FIVE YEARS.			
No.	DISTRICTS.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.				Males.	Females.	Total.	No.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	AMBALA DIVISION.																
1	Hissar ...	438,458	366,431	804,889	21,236	19,656	40,892	26·4	24·4	50·8	108·0	21·5	...	23·5	21·8	45·3	1
2	Rohtak ...	385,401	329,483	714,884	19,981	18,269	38,250	28·0	25·6	53·5	109·4	18·8	...	23·2	21·0	44·2	2
3	Gurgaon ...	389,215	339,952	729,167	18,517	17,179	35,696	25·4	23·6	49·0	107·8	9·7	...	22·2	20·4	42·6	3
4	Karnal ...	437,698	362,089	799,787	20,365	18,958	39,323	25·5	23·7	49·2	107·4	4·4	...	23·8	21·7	45·5	4
5	Ambala ...	357,470	275,083	632,553	14,196	13,064	27,260	22·4	20·7	43·1	108·7	5·0	...	21·6	20·0	41·6	5
6	Simla ...	22,015	12,955	3,970	380	387	767	10·9	11·1	21·9	98·2	...	0·5	10·6	9·4	20·0	6
	JULLUNDUR DIVISION.																
7	Kangra ...	398,401	368,285	766,686	15,175	14,236	29,411	19·8	18·6	38·4	106·6	11·9	...	18·4	17·4	35·8	7
8	Hoshiarpur ...	501,510	417,959	918,569	20,132	18,427	38,559	21·9	20·1	42·0	109·3	12·6	...	21·0	19·5	40·5	8
9	Jullundur ...	440,599	347,357	787,956	18,286	17,236	35,522	23·2	21·9	45·1	106·1	15·4	...	22·3	21·0	43·3	9
10	Ludhiana ...	283,531	223,661	517,192	12,996	11,893	24,889	25·1	23·0	48·1	109·3	19·0	...	23·4	21·9	45·3	10
11	Ferozepore ...	520,868	412,631	933,499	25,068	22,735	47,803	26·9	24·4	61·2	110·3	24·8	...	24·3	22·0	46·3	11
	LAHORE DIVISION.																
12	Lahore ...	581,498	436,244	1,017,742	25,821	23,127	48,948	25·4	22·7	48·1	111·6	13·9	...	23·0	20·9	44·0	12
13	Amritsar ...	495,533	383,778	879,311	22,673	20,917	43,590	25·8	23·8	49·6	108·4	13·8	...	24·5	22·6	47·1	13
14	Gurdaspur ...	466,115	366,446	832,561	20,185	19,115	39,300	24·2	23·0	47·2	105·6	17·2	...	23·5	21·7	45·2	14
15	Sialkot ...	530,755	432,524	963,279	24,623	22,808	47,431	25·6	23·7	49·2	108·0	17·1	...	23·9	22·4	46·3	15
16	Gujranwala ...	518,251	405,168	923,419	22,374	19,745	42,119	24·2	21·4	45·6	113·3	16·4	...	22·8	20·5	43·3	16
	RAWALPINDI DIVISION.																
17	Gujrat ...	400,596	345,038	745,634	17,785	16,159	33,944	23·9	21·7	45·5	110·1	16·8	...	21·9	20·1	42·0	17
18	Shahpur ...	376,886	310,480	687,366	15,008	13,236	28,244	21·8	19·3	41·1	113·4	17·0	...	20·7	18·4	39·1	18
19	Jhelum ...	262,228	241,967	504,195	10,521	9,365	19,886	20·9	18·6	39·4	112·4	12·6	...	19·6	17·4	37·0	19
20	Rawalpindi ...	267,724	229,918	507,642	10,353	9,640	19,993	20·4	19·0	39·4	107·4	4·2	...	19·9	18·1	38·0	20
21	Attock ...	270,392	244,894	515,286	11,177	10,240	21,417	21·7	19·9	41·6	109·2	11·7	...	20·6	18·5	39·0	21
22	Mianwali ...	179,997	161,480	341,377	7,640	6,622	14,262	22·4	19·4	41·8	115·4	14·9	...	21·8	19·3	41·1	22
	MULTAN DIVISION.																
23	Montgomery ...	292,836	242,463	535,299	11,477	10,417	21,894	21·4	19·5	40·9	110·2	22·6	...	20·3	17·8	38·1	23
24	Lyallpur ...	486,927	370,784	857,711	22,344	20,902	43,246	26·1	24·4	50·4	106·9	26·0	...	24·7	22·8	47·5	24
25	Jhang ...	277,128	238,298	515,526	12,459	11,211	23,670	24·2	21·7	45·9	111·1	17·2	...	21·6	19·5	41·1	25
26	Multan ...	435,410	365,965	801,375	18,211	16,052	34,263	22·7	20·0	42·8	113·4	18·3	...	21·0	18·9	39·9	26
27	Muzaffargarh ...	308,350	261,111	569,461	12,574	10,776	23,350	22·1	18·9	41·0	116·7	13·9	...	20·2	17·4	37·5	27
28	Dera Ghazi Khan ...	272,409	227,451	499,860	7,860	6,452	14,312	15·7	12·9	28·6	121·8	5·1	...	16·7	13·9	30·6	28
	Total ...	10,608,101	8,729,045	19,337,146	459,417	418,824	878,241	23·8	21·7	45·4	109·7	15·2	...	22·1	20·2	42·3	

* Excluding population of military cantonments.

STATEMENT OF BIRTHS AND DEATHS REGISTERED IN

1	2	3	4	5			6		7		
No.	DISTRICTS.	Area in square miles.	Average population per square mile.	POPULATION (CENSUS, 1911).			BIRTHS.		NUMBER OF DEATHS REGISTERED.		
				Males.	Females.	Total.	Total number.	Birth rate per 1,000 of population.	Males.	Females.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
	AMBALA DIVISION.										
1	Hissar	5,213	154	438,458	366,431	804,889	40,892	50·8	12,424	11,159	23,583
2	Rohtak	2,248	318	385,401	329,433	714,834	38,250	53·5	13,067	11,722	24,789
3	Gurgaon	2,264	322	389,215	339,952	729,167	35,696	49·0	15,023	13,659	28,682
4	Karnal	3,153	254	437,698	362,089	799,787	39,323	49·2	18,565	17,244	35,809
5	Ambala	1,851	342	357,470	275,083	632,553	27,260	43·1	12,497	11,616	24,113
6	Simla	101	346	22,015	12,955	34,970	767	21·9	467	317	784
	JULLUNDUR DIVISION.										
7	Kangra	9,978	77	398,401	368,285	766,686	29,411	38·4	10,349	10,001	20,350
8	Hoshiarpur	2,247	409	501,510	417,059	918,569	38,559	42·0	14,265	12,744	27,009
9	Jullundur	1,431	551	440,599	347,357	787,956	35,522	45·1	12,061	11,374	23,435
10	Ludhiana	1,452	356	293,531	223,661	517,192	24,889	48·1	7,747	7,323	15,070
11	Ferozepore	4,286	218	520,868	412,631	933,499	47,803	51·2	12,773	11,885	24,658
	LAHORE DIVISION.										
12	Lahore	2,824	360	581,498	436,244	1,017,742	48,948	48·1	18,650	16,200	34,850
13	Amritsar	1,601	549	495,533	383,778	879,311	43,590	49·6	16,471	15,004	31,475
14	Gurdaspur	1,889	441	466,115	366,446	832,561	39,300	47·2	13,137	11,806	24,943
15	Sialkot	1,991	484	530,755	432,524	963,279	47,431	49·2	16,015	14,931	30,946
16	Gujranwala	4,082	226	518,251	405,168	923,419	42,119	45·6	14,172	12,826	26,998
	RAWALPINDI DIVISION.										
17	Gujrat	2,051	364	400,596	345,038	745,634	33,944	45·5	11,029	10,382	21,411
18	Shahpur	5,097	135	376,886	310,480	687,366	28,244	41·1	8,658	7,884	16,542
19	Jhelum	2,813	179	262,228	241,967	504,195	19,836	39·4	7,001	6,514	13,515
20	Rawalpindi	2,010	253	267,724	239,918	507,642	19,993	39·4	9,083	8,783	17,866
21	Attock	4,025	128	270,392	244,894	515,286	21,417	41·6	7,901	7,529	15,430
22	Mianwali	5,395	63	179,897	161,480	341,377	14,262	41·8	4,737	4,428	9,165
	MULTAN DIVISION.										
23	Montgomery	4,652	115	292,836	242,463	535,299	21,894	40·9	5,202	4,599	9,801
24	Lyallpur	3,153	272	486,927	370,784	857,711	43,246	50·4	10,719	10,206	20,925
25	Jhang	3,363	153	277,128	238,398	515,526	23,670	45·9	7,609	7,173	14,782
26	Multan	6,107	131	435,410	365,965	801,375	34,263	42·3	10,236	9,431	19,667
27	Muzaffargarh	6,052	94	308,350	261,111	569,461	23,350	41·0	8,051	7,381	15,432
28	Dera Ghazi Khan	5,325	94	272,409	227,451	499,860	14,312	28·6	6,417	5,337	11,754
	Total	96,654	200	10,608,101	8,729,045	19,337,146	878,241	45·4	304,326	279,458	583,784

NOTE—Those born dead are not included

No. II.

EACH DISTRICT OF THE PUNJAB DURING THE YEAR 1913.

8	9											10			11
Number of deaths of males to every 100 deaths of females.	DEATHS PER 1,000 OF POPULATION FROM											MEAN RATIO OF DEATHS PER 1,000 DURING PREVIOUS FIVE YEARS.			No.
	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory cases.	Injuries.	All other causes.	All causes.			Males.	Females.	Total.	
									Males.	Females.	Total.				
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
111·3	0·002	1·9	0·3	18·4	0·5	1·2	0·3	6·8	28·3	30·5	29·3	35·5	39·6	37·3	1
111·5	0·01	0·2	2·8	18·7	0·4	1·6	0·4	10·6	33·9	35·6	34·7	44·9	49·4	47·0	2
110·0	0·2	0·3	7·0	16·3	0·9	2·1	0·4	12·1	38·6	40·2	39·3	54·6	62·6	58·3	3
107·7	0·1	0·7	4·4	24·8	0·6	2·4	0·4	11·4	42·4	47·6	44·8	44·5	49·9	47·0	4
107·6	0·003	2·2	0·2	24·4	0·6	2·7	0·1	7·9	35·0	42·2	38·1	36·6	43·5	39·6	5
147·3	...	0·5	...	10·7	1·1	3·2	0·1	6·9	21·2	24·5	22·4	20·5	27·6	23·2	6
103·5	0·02	0·1	0·01	16·5	0·5	2·5	0·3	6·6	26·0	27·2	26·5	30·2	31·9	31·0	7
111·9	0·03	1·9	0·9	19·0	0·1	2·5	0·3	4·8	28·4	30·6	29·4	35·1	40·8	37·7	8
106·0	0·1	2·8	0·7	14·6	0·5	4·7	0·3	6·1	27·4	32·7	29·7	30·3	37·9	33·7	9
105·8	0·04	2·9	0·5	11·9	0·3	2·7	0·3	10·4	26·4	32·7	29·1	38·0	48·3	42·5	10
107·5	0·1	4·2	0·2	11·1	0·3	1·6	0·3	8·7	24·5	28·8	26·4	34·3	41·1	37·3	11
115·1	3·2	3·4	0·1	16·5	0·7	1·9	0·4	8·2	32·1	37·1	34·2	32·7	38·8	35·3	12
109·8	0·5	1·8	0·5	18·5	1·0	3·6	0·4	9·6	33·2	39·1	35·8	42·7	51·6	46·6	13
111·3	0·1	1·2	1·2	14·2	0·9	11·0	0·3	1·1	28·2	32·2	30·0	35·0	40·7	37·5	14
107·3	0·9	2·4	1·3	16·0	1·0	4·6	0·4	5·6	30·2	34·5	32·1	34·0	39·8	36·6	15
110·5	0·1	0·9	1·7	19·8	0·2	0·8	0·7	5·1	27·4	31·7	29·2	30·6	35·0	32·6	16
106·2	0·8	2·7	0·1	15·2	0·4	3·1	0·3	6·1	27·5	30·1	28·7	28·5	31·7	29·9	17
109·8	0·01	2·8	0·02	13·9	0·3	0·8	0·5	5·8	23·0	25·4	24·1	27·3	30·0	28·5	18
107·5	0·03	0·9	0·6	17·3	0·4	1·8	0·5	5·4	26·7	26·9	26·8	30·5	31·3	30·9	19
103·4	0·04	0·7	0·6	23·4	3·9	2·1	0·5	3·9	33·9	36·6	35·2	30·7	31·4	31·0	20
104·9	0·003	3·4	0·02	19·9	0·1	1·1	0·4	5·1	29·2	30·7	29·9	27·2	28·5	27·8	21
107·0	...	0·8	...	20·7	0·5	0·7	0·4	3·8	26·3	27·4	26·9	26·7	27·3	27·0	22
113·1	0·03	2·9	...	11·0	0·1	0·2	0·4	3·7	17·8	19·0	18·3	26·6	30·1	28·2	23
105·0	0·01	3·5	0·002	13·6	0·4	1·0	0·4	5·6	22·0	27·5	24·4	23·1	28·6	25·5	24
106·1	...	3·0	0·2	16·3	0·6	0·9	0·1	7·6	27·5	30·1	28·7	27·6	29·6	28·5	25
108·5	0·1	0·9	...	17·5	0·3	0·02	0·4	5·3	23·5	25·8	24·5	26·8	29·7	28·1	26
109·1	...	1·4	...	22·0	0·2	0·1	0·5	3·0	26·1	28·3	27·1	27·8	29·2	28·4	27
120·2	0·004	3·5	...	16·3	0·5	0·5	0·3	2·5	23·6	23·5	23·5	23·7	24·6	24·1	28
108·9	0·3	2·0	0·9	17·2	0·6	2·3	0·4	6·6	28·7	32·0	30·2	33·3	37·9	35·4	

in this or any other statement,

ANNUAL FORM No. III.

DEATHS REGISTERED IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH
OF THE YEAR 1913.

1	2	3												4	5
No.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.	No.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	AMBALA DIVISION.														
1	Hissar ...	2,182	2,265	2,068	2,204	2,167	2,134	1,786	1,777	1,525	1,765	1,749	1,961	23,583	1
2	Rohitak ...	1,617	1,747	1,877	2,888	2,627	2,081	2,115	1,771	1,624	1,844	2,178	2,420	24,789	2
3	Gurgaon ...	2,322	2,463	3,085	4,302	3,063	2,272	2,163	1,875	1,571	1,597	1,878	2,091	28,682	3
4	Karnal ...	2,339	2,586	2,711	3,552	3,653	2,800	2,524	2,234	2,725	3,534	3,681	3,470	35,809	4
5	Ambala ...	1,493	1,448	2,013	2,148	2,319	1,933	1,822	1,665	1,959	2,625	2,261	2,427	24,113	5
6	Simla ...	47	36	80	69	66	68	66	93	63	69	79	48	784	6
	JULLUNDUR DIVISION.														
7	Kangra ...	1,631	1,607	1,758	1,660	1,914	1,606	1,476	1,574	1,740	1,875	1,630	1,879	20,350	7
8	Hoshiarpur ...	2,302	2,375	2,598	2,756	2,865	2,168	1,876	1,739	1,850	2,143	2,087	2,250	27,009	8
9	Jullundur ..	2,083	2,201	2,098	2,273	2,489	1,900	1,636	1,728	1,530	1,730	1,808	1,959	23,435	9
10	Ludhiana ...	1,259	1,300	1,442	1,375	1,451	1,184	1,193	1,082	950	1,197	1,314	1,323	15,070	10
11	Ferozepore ...	2,893	2,813	2,464	2,047	2,181	1,862	1,590	1,623	1,502	1,615	1,885	2,183	24,658	11
	LAHORE DIVISION.														
12	Lahore ...	3,150	2,651	2,386	2,250	2,799	2,742	3,208	4,370	2,994	2,909	2,760	2,631	34,850	12
13	Amritsar ...	2,313	2,115	2,203	2,167	3,375	2,745	2,312	2,538	2,529	3,191	3,164	2,823	31,475	13
14	Gurdaspur ...	1,720	1,748	2,045	2,083	2,840	2,035	1,821	1,758	2,054	2,260	2,316	2,263	24,943	14
15	Sialkot ...	2,514	2,197	2,482	2,394	3,058	2,003	1,847	2,572	2,789	3,208	3,120	2,762	30,946	15
16	Gujranwala ...	2,272	1,938	1,969	1,878	2,407	1,770	1,597	1,744	1,762	3,094	3,222	3,345	26,998	16
	RAWALPINDI DIVISION.														
17	Gujrat ...	2,235	1,822	1,741	1,614	1,659	1,309	1,380	1,786	1,885	2,055	1,805	2,120	21,411	17
18	Shahpur ...	1,524	1,456	1,410	1,129	1,264	1,334	1,027	983	1,047	1,596	1,788	1,984	16,542	18
19	Jhelum ..	1,283	1,239	1,117	1,050	923	778	778	879	1,090	1,406	1,522	1,450	13,515	19
20	Rawalpindi ...	1,569	1,460	1,460	1,197	1,080	905	907	1,181	1,643	2,382	2,085	1,997	17,866	20
21	Attock ...	1,757	1,520	1,403	1,135	1,037	897	883	1,027	1,018	1,464	1,631	1,658	15,430	21
22	Mianwali ...	826	755	759	672	701	609	508	524	596	951	1,131	1,133	9,165	22
	MULTAN DIVISION.														
23	Montgomery ...	1,437	1,262	1,051	646	632	561	613	615	557	707	803	917	9,801	23
24	Lyallpur ...	2,506	2,335	2,157	1,575	1,926	1,499	1,202	1,337	1,182	1,563	1,742	1,901	20,925	24
25	Jhang ...	1,150	1,181	1,262	1,073	1,145	981	804	860	812	1,305	2,011	2,198	14,782	25
26	Multan ...	1,819	1,677	1,631	1,385	1,582	1,421	1,244	1,271	1,389	1,915	2,255	2,078	19,667	26
27	Muzaffargarh ...	1,396	1,248	1,258	1,052	1,104	898	854	745	900	1,735	2,337	1,905	15,432	27
28	Dera Ghazi Khan	1,050	1,060	1,088	860	846	740	622	552	702	1,301	1,525	1,408	11,754	28
	Total for the Province.	50,689	48,505	49,616	49,434	53,173	43,235	39,854	41,903	41,988	53,036	55,767	56,584	583,784	
	Ratio of deaths per 1,000 in each month.	2.62	2.51	2.57	2.56	2.75	2.24	2.06	2.17	2.17	2.74	2.88	2.93	30.19	

ANNUAL FORM No. IV.

DEATHS REGISTERED ACCORDING TO SPECIFIED AGE PERIODS FROM
DIFFERENT DISEASES IN THE DISTRICTS OF THE PUNJAB
DURING THE YEAR 1913.

ANNUAL FORM

DEATHS REGISTERED ACCORDING TO SPECIFIED AGE PERIODS FROM DIFFERENT

1	2	3	4	5		6		7		8		
No.	Divisions.	Districts.	DISEASES.	UNDER 1 YEAR.		1 YEAR AND UNDER 5 YEARS.		5 YEARS AND UNDER 10 YEARS.		10 YEARS AND UNDER 15 YEARS.		
				Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
1	2	3	4	5	6	7	8	9	10	11	12	
1	AMBALA.	HISSAR.	Cholera ...	...	...	...	...	...	...	...	...
			Small-pox ...	...	271	225	282	232	122	172	93	94
			Plague ...	...	...	...	...	...	...	...	8	10
			Fevers ...	...	2,770	2,211	1,292	1,350	258	242	104	100
			Dysentery and Diarrhoea ...	...	5	3	10	8	11	5	18	12
			Respiratory diseases ...	...	3	2	6	3	8	12	14	16
			Injuries ...	...	4	2	3	1	8	3	8	4
			All other causes ...	...	1,199	1,082	807	806	322	190	114	94
			Total ...	...	4,252	3,525	2,400	2,400	729	624	359	330
		2	AMBALA.	ROHTAK.	Cholera	1	2	2
Small-pox				22	18	26	25	10	10	2	3
Plague				15	22	27	30	67	119	101	138
Fevers				1,650	1,543	1,052	947	348	322	303	256
Dysentery and Diarrhoea				26	22	43	37	7	9	3	2
Respiratory diseases				39	47	23	27	5	4	9	9
Injuries				2	1	17	10	22	10	16	6
All other causes				2,681	2,149	853	764	56	57	53	45
Total				4,435	3,802	2,041	1,840	515	532	489	461
3	AMBALA.			GURGAON.	Cholera	1	3	4	7	5
		Small-pox ...	...		52	54	33	27	29	23	2	2
		Plague ...	...		158	121	100	96	186	214	278	295
		Fevers ...	...		1,414	1,221	633	624	425	412	397	316
		Dysentery and Diarrhoea ...	...		2	2	6	4	16	15	28	29
		Respiratory diseases ...	...		1	2	3	5	12	9	20	22
		Injuries ...	...		...	...	1	1	3	2	11	14
		All other causes ...	...		2,390	2,041	1,378	1,255	81	57	74	61
		Total ...	...		4,018	3,441	2,154	2,012	755	736	817	744
		4	AMBALA.	KARNAL.	Cholera	4	2	7	3	1
Small-pox				85	76	98	82	40	39	32	28
Plague				61	39	75	89	134	187	183	245
Fevers				2,102	1,900	1,956	1,984	505	459	323	305
Dysentery and Diarrhoea				54	37	55	46	3	6	10	2
Respiratory diseases				67	73	52	91	19	34	23	11
Injuries				10	...	10	14	16	14	11	11
All other causes				3,126	2,889	1,206	870	99	110	35	50
Total				5,505	5,014	3,452	3,180	818	856	620	653
5	AMBALA.			AMBALA.	Cholera
		Small-pox ...	...		334	284	203	198	55	38	65	45
		Plague ...	...		2	3	1	4	2	1	...	...
		Fevers ...	...		3,001	3,144	1,101	1,303	329	247	70	58
		Dysentery and Diarrhoea ...	...		39	17	36	15	12	31	27	21
		Respiratory diseases ...	...		481	393	267	189	65	59	24	25
		Injuries ...	...		...	...	...	...	...	1	...	3
		All other causes ...	...		709	603	513	411	103	91	206	191
		Total ...	...		4,566	4,444	2,121	2,120	566	467	393	343
		6	AMBALA.	SIMLA.	Cholera
Small-pox	1	...	...	...	4	1
Plague
Fevers				43	29	18	17	6	3	5	4
Dysentery and Diarrhoea				11	13	4	3	...	...	...	1
Respiratory diseases				17	11	3	6	...	1	...	1
Injuries	1	...	...	...	...
All other causes				58	46	12	11	3	3	1	...
Total				129	99	38	38	9	7	10	7

No. IV.

DISEASES IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1913.

9		10		11		12		13		14		15		16
15 YEARS AND UNDER 20 YEARS.		20 YEARS AND UNDER 30 YEARS.		30 YEARS AND UNDER 40 YEARS.		40 YEARS AND UNDER 50 YEARS.		50 YEARS AND UNDER 60 YEARS.		60 YEARS AND UPWARDS.		TOTAL.		No.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
...	1	1	1	1	1
6	6	5	2	...	1	...	...	...	...	...	...	779	732
25	30	53	22	22	17	9	10	...	7	...	2	117	98	
82	62	867	893	320	420	393	334	472	392	1,172	1,098	7,730	7,102	
21	19	18	23	37	20	41	28	23	38	20	73	204	179	
25	21	20	27	79	44	92	87	142	110	134	107	523	429	
9	7	16	7	15	10	13	12	19	12	52	14	147	72	
101	82	71	87	89	79	73	78	81	23	66	25	2,923	2,546	
269	227	1,050	1,061	563	592	621	549	737	582	1,444	1,269	12,424	11,159	2
...	...	...	1	...	...	1	...	...	...	...	...	3	4
...	3	1	2	...	1	2	...	...	...	...	...	63	62
142	107	175	164	154	137	152	112	105	58	91	88	1,029	975	
271	248	515	565	523	519	578	504	580	505	1,204	938	7,024	6,347	
7	4	14	7	11	6	15	12	23	10	22	19	171	123	
8	10	31	26	31	36	72	73	113	93	235	250	566	575	
9	22	25	46	15	24	8	12	12	6	7	10	133	147	3
42	66	68	99	67	93	86	72	81	56	91	83	4,078	3,484	
479	460	829	910	801	816	914	785	914	728	1,650	1,388	13,067	11,722	
11	12	12	9	15	13	8	9	5	6	...	...	62	58
8	5	2	3	...	...	...	...	...	...	...	...	126	114
234	240	439	464	361	406	343	329	241	221	194	205	2,534	2,591	
292	137	687	616	482	480	617	444	609	509	800	778	6,356	5,537	
38	43	66	56	64	46	45	53	38	40	22	33	325	326	4
29	34	46	52	57	59	60	57	64	57	488	485	780	782	
20	32	25	42	24	35	17	24	14	6	5	2	120	158	
67	54	131	126	139	131	144	124	137	101	179	143	4,720	4,093	
699	557	1,408	1,368	1,142	1,170	1,234	1,040	1,108	940	1,688	1,651	15,023	13,659	
4	4	13	3	6	2	3	4	9	4	7	3	47	32	
18	12	9	6	7	2	1	2	...	...	...	...	290	247
225	187	334	302	248	253	216	188	160	148	134	145	1,770	1,783	5
380	278	907	898	800	898	946	779	887	713	1,498	1,319	10,304	9,533	
13	15	27	13	30	16	27	19	15	9	44	30	278	193	
37	47	76	92	109	89	123	107	140	129	290	283	936	956	
13	15	17	33	27	23	13	10	5	6	16	29	138	155	
45	46	52	85	52	94	46	53	51	23	90	125	4,802	4,345	
735	604	1,435	1,432	1,279	1,377	1,375	1,162	1,267	1,032	2,079	1,934	18,565	17,244	
1	...	1	2	...	6
55	49	24	28	6	8	3	7	...	5	...	3	747	665	
28	13	15	17	8	1	...	...	...	...	...	...	56	39
100	73	580	728	570	585	476	295	416	185	1,339	851	7,982	7,469	
9	3	7	12	8	5	45	35	17	18	30	14	230	171	
10	9	12	8	13	5	17	9	11	6	25	53	925	756	
17	12	5	2	5	4	2	1	...	...	...	...	30	22
68	108	111	90	136	114	212	244	334	305	133	337	2,525	2,494	7
288	267	755	885	746	722	755	591	780	519	1,527	1,258	12,497	11,616	
...	
1	...	1	1	2	...	4	1	...	...	...	...	13	3
8	5	29	33	24	16	17	16	37	8	81	25	218	156	
2	...	1	2	...	...	...	1	...	2	...	...	18	22
3	2	21	4	7	4	14	7	...	2	1	8	66	46	
...	1	2	8
7	6	15	6	9	9	13	1	9	...	25	6	152	88	
21	13	67	46	42	29	48	26	46	13	57	39	467	317	

1	2	3	4	5	6	7	8					
No.	Divisions.	Districts.	DISEASES.	UNDER 1 YEAR.	1 YEAR AND UNDER 5 YEARS.	5 YEARS AND UNDER 10 YEARS.	10 YEARS AND UNDER 15 YEARS.					
1	2	3	4	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
7	JULLUNDUR.	KANGRA.	Cholera	1	...	
			Small-pox	7	2	3	...	5	2	14	...
			Plague
			Fevers	2,232	1,858	665	880	132	124	64	74
			Dysentery and Diarrhoea	35	51	12	42	10	15	27	12
			Respiratory diseases	96	91	208	39	39	97	49	56
			Injuries	1	4	16	5	8	13	9	25
			All other causes	976	877	105	98	98	73	99	89
			Total	3,347	2,883	1,009	1,064	292	324	263	258
8			HOSHIAPUR.	Cholera	1	1	...	2	1	1	...
			Small-pox	269	213	271	270	87	84	22	28
			Plague	18	16	35	41	47	60	51	68
		Fevers	1,850	1,718	2,030	2,030	401	394	289	286	
		Dysentery and Diarrhoea	23	18	1	2	
		Respiratory diseases	581	414	219	150	18	16	13	13	
		Injuries	3	6	26	19	17	11	16	4	
		All other causes	1,894	1,566	174	182	35	17	17	6	
		Total	4,639	3,952	2,757	2,694	607	583	409	405	
9		JULLUNDUR.	Cholera	4	4	4	1	1	2	
		Small-pox	330	310	339	339	191	141	53	38	
		Plague	15	11	22	31	40	31	35	39	
		Fevers	1,207	1,434	1,351	1,495	245	226	185	177	
		Dysentery and Diarrhoea	51	30	55	41	10	17	4	4	
		Respiratory diseases	574	544	451	367	52	54	37	36	
		Injuries	22	6	31	21	23	11	9	4	
		All other causes	2,124	2,184	139	153	12	14	6	6	
		Total	4,323	4,519	2,392	2,451	577	495	330	306	
10		LUDHIANA.	Cholera	3	2	
		Small-pox	274	197	218	201	179	139	47	53	
		Plague	19	18	24	19	6	10	4	13	
		Fevers	320	271	811	841	86	110	119	118	
		Dysentery and Diarrhoea	27	15	29	14	2	1	10	3	
		Respiratory diseases	131	145	144	171	34	22	19	10	
		Injuries	7	3	16	10	8	5	4	1	
		All other causes	2,293	2,304	293	313	16	8	21	12	
		Total	3,071	2,953	1,535	1,569	331	295	227	213	
11		FEROZEPUR.	Cholera	1	1	1	3	5	7	
		Small-pox	658	585	711	623	373	314	74	76	
		Plague	1	1	5	7	10	6	7	9	
		Fevers	1,853	1,871	1,067	955	195	229	158	172	
		Dysentery and Diarrhoea	4	2	16	8	10	9	15	10	
		Respiratory diseases	26	18	44	33	41	48	40	29	
		Injuries	24	14	13	9	15	9	
		All other causes	2,511	2,237	1,030	970	83	68	64	51	
		Total	5,053	4,7							

No. IV—CONTINUED.

DISEASES IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1913.

9		10		11		12		13		14		15		16
15 YEARS AND UNDER 20 YEARS.		20 YEARS AND UNDER 30 YEARS.		30 YEARS AND UNDER 40 YEARS.		40 YEARS AND UNDER 50 YEARS.		50 YEARS AND UNDER 60 YEARS.		60 YEARS AND UPWARDS.		TOTAL.		No.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
9	2	3	1	3	3	...	2	10	8	7
8	2	9	5	8	2	...	2	...	...	...	...	70	17
1	...	2	1	3	1	...	1	...	...	...	...	6	3
66	232	360	743	387	499	326	317	485	269	1,587	1,355	6,304	6,351	
13	4	28	8	19	10	28	12	9	15	5	16	186	185	
67	80	97	92	99	86	123	80	128	80	193	131	1,099	832	
15	4	30	30	23	2	15	3	23	3	11	...	151	89	
64	116	113	246	210	215	329	216	169	266	360	320	2,523	2,516	
237	440	642	1,126	752	818	828	633	822	633	2,157	1,822	10,349	10,001	8
2	1	...	2	2	2	1	2	3	2	5	3	18	14	
32	46	39	63	53	55	48	47	24	24	21	20	866	850	
37	34	70	54	43	49	49	44	28	28	41	42	419	436	
166	212	488	699	524	543	583	447	704	438	2,022	1,654	9,057	8,421	
1	...	1	1	1	1	...	1	3	1	1	1	31	25	
23	18	56	67	65	74	88	45	81	39	178	88	1,322	924	
7	4	16	13	17	5	11	3	17	3	21	12	151	80	9
14	23	52	57	37	48	35	37	46	16	97	42	2,401	1,994	
282	338	722	956	742	777	815	626	906	551	2,386	1,862	14,265	12,744	
1	3	2	4	4	3	4	1	3	...	5	5	28	23	
37	25	47	53	37	49	34	21	20	14	46	60	1,134	1,050	
27	18	32	26	28	30	34	15	30	19	27	42	290	262	
151	178	301	354	319	324	379	279	441	334	1,280	878	5,859	5,679	
5	3	10	9	12	4	10	1	17	7	36	26	210	142	10
42	33	65	70	71	49	71	61	123	53	517	402	2,003	1,669	
7	7	6	11	12	9	9	3	17	2	26	17	162	91	
8	11	16	23	15	11	10	11	16	10	29	35	2,375	2,458	
278	278	479	550	498	479	551	392	667	439	1,966	1,465	12,061	11,374	
2	...	1	4	2	5	2	...	1	...	...	1	11	12
39	19	28	31	15	12	9	16	8	3	5	2	822	673	11
16	10	21	26	11	3	4	14	7	9	6	11	118	133	
98	139	219	299	199	248	226	172	187	182	839	680	3,104	3,560	
2	...	8	6	6	1	7	5	9	2	17	8	117	55	
12	13	40	27	80	61	92	41	125	67	90	72	767	629	
2	4	26	12	9	7	9	8	6	6	16	12	103	68	
7	4	12	9	6	2	9	5	16	14	32	21	2,705	2,693	
178	189	355	414	328	339	358	261	359	283	1,005	807	7,747	7,323	12
4	4	4	5	2	4	2	2	1	1	...	...	20	27
61	69	70	71	54	60	41	24	33	21	27	10	2,102	1,853	
7	12	14	17	13	10	7	9	6	6	2	3	72	80	
118	146	322	366	222	277	243	220	258	168	771	705	5,207	5,109	
16	7	11	18	20	13	23	10	17	16	40	26	172	119	
49	38	87	78	70	72	103	69	129	105	250	202	839	692	
13	16	24	18	23	20	22	14	13	4	10	7	157	111	13
54	56	93	88	72	87	62	74	73	84	162	179	4,204	3,894	
322	348	625	661	476	543	503	422	530	405	1,262	1,132	12,773	11,885	
150	110	367	250	376	221	365	149	128	107	18	22	1,889	1,338	
60	48	56	35	63	28	19	11	1	2	...	...	1,843	1,645
3	6	6	4	7	3	6	4	3	...	...	...	36	25
161	197	453	448	233	310	376	314	499	330	1,556	1,318	8,734	8,060	14
43	24	41	30	38	20	16	17	24	20	40	31	402	293	
35	34	191	161	86	136	64	64	48	58	166	138	994	905	
18	9	16	5	29	12	40	6	24	10	11	4	244	113	
27	37	56	79	91	68	57	67	86	35	179	89	4,508	3,821	
497	465	1,186	1,012	923	798	943	632	813	562	1,970	1,602	18,650	16,200	

DEATHS REGISTERED ACCORDING TO SPECIFIED AGE PERIODS FROM DIFFERENT

1	2	3	4	5		6		7		8				
No.	Divisions.	Districts.	DISEASES.	UNDER 1 YEAR.		1 YEAR AND UNDER 5 YEARS.		5 YEARS AND UNDER 10 YEARS.		10 YEARS AND UNDER 15 YEARS.				
				Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.			
1	2	3	4	5	6	7	8	9	10	11	12			
13	LAHORE - CONCLUDED.	AMRITSAR.	Cholera	4	2	33	29	38	27	33	25			
			Small-pox	275	216	284	230	160	170	50	55			
			Plague	8	8	12	14	21	18	32	38			
			Fevers	1,976	2,222	2,741	2,727	204	183	213	209			
			Dysentery and Diarrhoea	36	28	62	50	54	38	40	19			
			Respiratory diseases	221	182	100	93	128	119	101	97			
			Injuries ... ..	...	1	14	12	36	13	17	11		
			All other causes	3,123	2,749	663	616	78	59	31	34			
			Total	5,643	5,408	3,909	3,771	719	627	517	488			
			14	LAHORE - CONCLUDED.	GURDASPUR.	Cholera	2	4	7	2	3	2	1
						Small-pox	136	128	171	156	72	64	41	38
						Plague	28	26	76	87	47	67	37	50
						Fevers	1,096	852	1,566	1,846	284	260	148	159
Dysentery and Diarrhoea	45	36				114	101	31	24	27	18			
Respiratory diseases	3,049	2,606				834	681	96	88	64	59			
Injuries	3	4				16	12	29	14	23	20			
All other causes	68	52				113	117	44	33	23	28			
Total	4,425	3,706				2,894	3,007	605	553	365	373			
15	LAHORE - CONCLUDED.	SIALKOT.				Cholera	2	...	115	126	43	53	33	31
						Small-pox	338	300	533	471	128	147	58	56
						Plague	14	20	120	125	68	79	66	70
						Fevers	2,495	2,260	1,947	2,119	366	358	218	251
			Dysentery and Diarrhoea	133	114	129	131	49	30	23	16			
			Respiratory diseases	816	733	596	521	96	89	74	61			
			Injuries	4	10	43	34	32	29	15	14			
			All other causes	1,035	942	680	631	118	95	70	69			
			Total	4,837	4,379	4,163	4,158	900	880	557	568			
			16	LAHORE - CONCLUDED.	GUJRANWALA.	Cholera	1	...	6	3	2	...
						Small-pox	144	116	180	163	55	48	50	40
						Plague	1	...	67	56	59	93	97	46
						Fevers	2,652	2,288	2,813	2,756	621	650	227	213
Dysentery and Diarrhoea	17	11				8	2	5	4	4	1			
Respiratory diseases	94	82				68	56	62	50	17	5			
Injuries	82	57				63	41	56	37	12	13			
All other causes	1,383	1,415				306	323	77	61	107	177			
Total	4,378	3,969				3,506	3,397	941	946	516	495			
17	RAWALPINDI.	GUJRAT.				Cholera	5	3	43	59	56	37	35	19
						Small-pox	387	372	353	393	117	146	40	43
						Plague	1	1	1	2	...
						Fevers	963	941	1,481	1,636	326	323	185	177
			Dysentery and Diarrhoea	28	14	51	62	11	12	10	4			
			Respiratory diseases	539	433	157	144	25	13	16	24			
			Injuries ... ..	...	3	43	31	24	23	8	7		
			All other causes	1,417	1,185	614	561	60	49	44	37			
			Total	3,339	2,951	2,742	2,887	620	604	340	311			
			18	RAWALPINDI.	SHAHNUR.	Cholera	1	...	2
						Small-pox	284	271	341	309	143	144	67	78
						Plague	3	...	1	1
						Fevers	1,005	947	1,290	1,301	337	349	187	179
Dysentery and Diarrhoea	11	10				27	18	1	2	2	3			
Respiratory diseases	25	3				14	11	5	8	11	11			
Injuries	9	1				46	45	34	27	26	8			
All other causes	1,706	1,390				178	179	36	29	29	20			
Total	3,040	2,622				1,897	1,863	561	559	323	300			

No. IV—CONTINUED.

DISEASES IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1913

9		10		11		12		13		14		15		16
15 YEARS AND UNDER 20 YEARS		20 YEARS AND UNDER 30 YEARS.		30 YEARS AND UNDER 40 YEARS.		40 YEARS AND UNDER 50 YEARS.		50 YEARS AND UNDER 60 YEARS.		60 YEARS AND UPWARDS.		TOTAL.		No.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
22	8	55	25	36	19	18	20	13	17	24	14	276	186	13
32	34	29	28	6	11	4	4	5	3	4	2	849	753	
28	15	44	36	20	23	20	19	17	18	16	13	218	202	
74	173	495	611	404	374	437	179	365	211	1,425	1,002	8,334	7,891	
43	12	50	25	42	27	41	20	48	31	101	78	517	328	
121	101	127	131	127	138	146	199	247	198	318	302	1,636	1,560	
16	9	18	21	16	8	20	12	32	11	43	18	212	116	
14	27	70	71	88	96	68	87	73	71	221	158	4,429	3,968	
350	379	888	948	739	696	754	540	800	560	2,152	1,587	16,471	15,004	14
1	2	9	3	2	4	2	3	5	3	...	...	27	28
30	24	21	26	10	12	10	6	4	3	4	3	499	460	
41	26	61	66	60	86	48	55	40	44	41	50	479	557	
133	146	334	470	373	411	427	301	408	267	1,313	1,028	6,082	5,740	
28	18	39	30	26	24	38	25	35	24	54	30	437	330	
57	60	126	146	132	99	126	98	127	101	351	240	4,962	4,178	
17	11	24	9	14	11	15	5	16	6	12	8	169	100	
25	27	42	37	33	34	48	28	42	27	44	30	482	413	
332	314	656	787	650	681	714	521	677	475	1,819	1,339	13,137	11,806	15
24	25	63	54	30	48	46	33	28	25	66	35	450	430	
24	36	62	54	40	28	14	15	1	5	9	7	1,207	1,119	
58	58	66	76	53	72	59	67	61	42	44	44	609	653	
164	165	297	373	342	374	313	316	390	296	1,251	1,075	7,783	7,587	
19	12	25	17	17	15	18	18	22	14	85	46	520	413	
60	56	84	82	74	75	95	62	77	64	437	314	2,409	2,057	
10	4	26	12	15	12	19	10	12	7	16	11	192	143	
63	69	102	85	90	108	111	79	114	82	462	369	2,845	2,529	
422	425	725	753	661	732	675	600	705	535	2,370	1,901	16,015	14,931	16
8	9	13	6	7	7	4	8	6	1	...	...	47	34
23	20	21	7	2	...	...	...	...	...	...	...	475	394
81	60	109	113	89	80	96	91	85	156	74	96	758	791	
111	99	405	451	429	458	400	381	510	331	1,301	1,140	9,469	8,767	
2	...	11	7	20	13	7	2	9	1	28	10	111	51	
16	4	42	30	40	28	46	34	20	1	35	23	440	313	
13	14	40	11	39	7	44	4	19	8	35	10	403	202	
62	72	29	33	14	45	57	33	17	11	412	104	2,469	2,274	
316	278	670	658	640	638	654	553	666	509	1,885	1,383	14,172	12,826	17
14	20	39	36	34	36	21	17	17	18	34	42	298	287	
21	19	37	36	14	27	6	9	1	2	1	6	977	1,053	
7	...	2	1	9	2	...	...	3	3	4	1	28	9
104	74	282	361	318	389	300	289	372	288	1,398	1,143	5,729	5,621	
5	4	7	5	9	7	11	9	9	8	35	22	176	147	
47	42	68	71	71	65	61	56	56	43	192	168	1,232	1,059	
10	3	20	9	10	8	19	4	12	4	7	6	153	98	
32	44	41	50	43	36	46	38	44	36	95	72	2,436	2,108	
240	206	496	569	508	570	464	422	514	402	1,766	1,460	11,029	10,382	18
...	...	1	...	2	...	...	...	1	1	...	...	7	1
43	28	83	34	45	30	10	9	4	3	12	9	1,032	915	
...	1	2	1	3	...	...	2	1	...	...	...	10	5
91	90	228	311	231	322	262	238	258	228	937	733	4,826	4,698	
2	2	3	6	2	9	9	7	14	8	29	18	100	83	
6	11	46	31	33	23	36	35	46	27	104	67	326	227	
10	4	20	4	16	13	18	4	8	4	16	5	203	115	
4	20	36	65	37	55	33	30	22	19	73	33	2,154	1,840	
156	156	419	452	369	452	368	325	354	290	1,171	865	8,658	7,884	

DEATHS REGISTERED ACCORDING TO SPECIFIED AGE PERIODS FROM DIFFERENT.

1	2	3	4	5		6		7		8	
No.	Divisions.	Districts.	DISEASES.	UNDER 1 YEAR.		1 YEAR AND UNDER 5 YEARS.		5 YEARS AND UNDER 10 YEARS.		10 YEARS AND UNDER 15 YEARS.	
1	2	3	4	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
				5	6	7	8	9	10	11	12
19	RAWALPINDI—CONCLUDED.	JHELUM.	Cholera	1	4	1	1	...
			Small-pox	75	73	76	89	21	34	12	10
			Plague	2	2	4	5	14	16	22	20
			Fevers	809	910	1,013	965	170	220	98	126
			Dysentery and Diarrhœa	23	5	19	8	3	5	3	4
			Respiratory diseases	33	22	22	24	8	8	10	18
			Injuries	2	4	17	10	23	17	7	11
			All other causes	982	670	77	116	73	55	76	25
		Total	1,926	1,687	1,228	1,217	316	356	229	214	
20		RAWALPINDI.	Cholera ... ..	...	1	1	...	...	5	1
			Small-pox	48	64	38	50	20	26	23	17
			Plague	1	2	1	14	12	19	15
	Fevers		833	861	1,141	1,318	369	403	182	203	
	Dysentery and Diarrhœa		806	699	133	146	13	10	5	1	
	Respiratory diseases		31	23	55	37	12	16	21	24	
	Injuries		1	9	3	12	25	17	21	13	
	All other causes		709	698	82	105	14	10	14	9	
	Total	2,428	2,356	1,455	1,669	467	494	290	283		
21	ATTOCK.	Cholera
		Small-pox	305	348	235	286	97	131	48	67	
		Plague ... ..	...	...	...	...	...	1	1	1
		Fevers	875	773	1,239	1,328	391	456	225	152	
		Dysentery and Diarrhœa	4	2	3	...	2	1	...	1	
		Respiratory diseases	15	7	8	12	4	8	10	12	
		Injuries ... ..	...	...	18	20	24	16	12	6
		All other causes	1,129	998	93	93	20	16	17	13	
	Total	2,328	2,128	1,596	1,739	538	629	313	252		
22	MIANWALL.	Cholera
		Small-pox	39	37	29	48	11	14	14	11	
		Plague ... ..	...	...	...	...	...	...	...	...
		Fevers	1,049	864	791	876	242	263	108	111	
		Dysentery and Diarrhœa	19	14	9	15	6	8	3	...	
		Respiratory diseases	19	9	7	10	2	2	5	1	
		Injuries	3	2	16	17	9	8	3	4	
		All other causes	574	418	45	46	19	12	8	5	
	Total	1,703	1,344	897	1,012	289	307	141	132		
23	MONTGOMERY.	Cholera
		Small-pox	262	253	249	231	181	173	19	14	
		Plague ... ..	...	...	...	...	...	...	...	...
		Fevers	1,379	1,188	464	459	70	35	14	51	
		Dysentery and Diarrhœa	7	5	3	2	5	4	6	3	
		Respiratory diseases	6	8	5	8	3	1	9	5	
		Injuries	13	4	11	5	15	3	19	5	
		All other causes	367	341	266	199	68	59	98	87	
	Total	2,034	1,799	998	904	342	275	165	165		
24	MULTAN.	LYALPUR.	Cholera	2	...	1	1
			Small-pox	493	439	576	550	210	191	87	107
			Plague	1	...
			Fevers	1,676	1,655	1,611	1,678	378	398	252	209
			Dysentery and Diarrhœa	26	35	36	39	12	6	6	5
			Respiratory diseases	98	85	76	54	11	8	13	9
			Injuries	6	13	48	66	18	19	12	9
			All other causes	2,038	1,994	166	166	49	41	24	15
	Total	4,337	4,221	2,515	2,553	679	664	395	354		

No. IV—CONTINUED.

DISEASES IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1913.

9		10		11		12		13		14		15		16
15 YEARS AND UNDER 20 YEARS.		20 YEARS AND UNDER 30 YEARS.		30 YEARS AND UNDER 40 YEARS.		40 YEARS AND UNDER 50 YEARS.		50 YEARS AND UNDER 60 YEARS.		60 YEARS AND UPWARDS.		TOTAL.		
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	No.
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	1	3	1	1	2	12	4	19
5	5	11	12	14	6	3	3	4	1	2	1	223	234	
15	13	40	21	25	26	19	21	10	11	11	5	162	140	
84	74	248	250	250	415	292	272	337	204	1,112	850	4,413	4,286	
4	2	10	2	8	11	19	9	18	5	31	15	138	66	
14	30	54	69	64	70	61	53	43	88	139	114	448	446	
3	5	28	7	33	7	15	10	12	8	15	7	155	86	
37	45	37	128	56	16	54	61	10	61	48	75	1,450	1,252	
163	175	431	490	451	551	463	429	436	328	1,358	1,067	7,001	6,514	
...	...	2	5	...	1	2	...	1	...	2	1	13	9	20
7	9	16	17	5	6	4	5	...	1	1	...	162	195	
14	11	31	12	35	17	32	18	15	12	19	14	181	113	
150	142	426	484	537	559	511	440	460	400	1,334	1,114	5,943	5,924	
5	5	18	25	14	17	17	10	14	3	29	18	1,054	934	
31	30	72	86	101	79	92	62	60	60	114	80	589	497	
16	9	15	13	37	7	16	8	14	7	22	9	170	104	
9	18	23	66	33	46	27	19	22	16	38	20	971	1,007	
232	224	603	708	762	732	701	562	586	499	1,559	1,256	9,083	8,783	
...	1	1	1	1	21
16	41	31	38	29	24	7	9	5	5	5	3	778	952	
...	1	2	...	1	...	2	...	...	...	...	...	6	3
119	105	359	324	362	445	350	309	396	312	925	789	5,241	4,993	
2	...	3	1	1	2	3	2	2	...	4	7	24	16	
23	14	40	55	41	46	36	40	55	36	72	53	304	283	
5	1	23	5	23	4	18	3	12	1	8	7	143	63	
9	6	38	29	18	26	15	13	25	9	40	15	1,404	1,218	
174	168	496	452	475	548	432	376	495	363	1,054	874	7,901	7,529	
...	22
12	8	18	16	8	8	...	...	1	1	2	1	134	144
...	
68	65	154	166	179	234	165	197	233	183	568	543	3,557	3,502	
...	2	5	4	6	5	15	3	10	7	24	13	97	71	
4	3	21	23	17	14	21	8	16	11	27	22	139	103	
5	1	11	2	10	7	2	...	6	1	8	3	73	45	
8	9	12	11	13	18	13	17	12	8	83	19	737	563	
97	88	221	222	233	286	216	225	278	211	662	601	4,737	4,428	
...	23
17	9	4	1	5	3	2	2	1	...	...	...	12	6
...	...	13	9	6	8	21	10	15	10	19	12	802	729	
26	20	108	120	111	176	119	84	146	142	655	514	3,092	2,789	
2	1	8	1	1	1	1	2	5	1	6	2	44	22	
2	1	5	2	9	5	12	9	7	3	5	5	63	47	
16	5	8	6	9	8	22	12	19	10	17	12	149	70	
42	61	60	47	43	32	36	24	30	36	30	50	1,040	936	
105	97	206	186	184	233	213	143	223	202	732	595	5,202	4,589	
...	24
42	28	2	...	2	...	...	...	1	...	...	...	8	1
...	...	69	54	54	26	22	10	6	3	8	5	1,567	1,413	
166	181	274	296	208	266	246	233	250	167	799	706	5,860	5,789	
6	2	12	7	10	7	18	6	23	7	39	16	188	130	
4	10	24	35	28	22	50	28	56	31	121	91	481	373	
10	6	25	11	20	7	11	3	10	1	11	3	171	138	
24	18	28	43	20	24	28	20	23	17	43	23	2,443	2,361	
252	245	434	446	312	352	375	301	369	226	1,021	844	10,719	10,206	

DEATHS REGISTERED ACCORDING TO SPECIFIED AGE PERIODS FROM DIFFERENT

1	2	3	4	5		6		7		8	
No.	Divisions.	Districts.	DISEASES.	UNDER 1 YEAR.		1 YEAR AND UNDER 5 YEARS.		5 YEARS AND UNDER 10 YEARS.		10 YEARS AND UNDER 15 YEARS.	
				Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2	3	4	5	6	7	8	9	10	11	12
25	MULTAN—CONCLUDED.	JHANG.	Cholera ...	191	210	201	179	179	164	39	28
			Small-pox ...	2	3	4	1	3	5	3	
			Plague ...	1,496	1,446	940	1,083	210	201	94	131
			Fevers ...	37	29	13	15	17	11	12	7
			Dysentery and Diarrhoea ...	23	17	21	12	34	27	29	21
			Respiratory diseases ...	3	...	3	1	5	3	3	2
			Injuries ...	1,141	903	327	287	101	96	59	41
			All other causes ...								
			Total	2,893	2,608	1,509	1,578	549	502	241	233
26	MULTAN.	Cholera ...	173	156	100	94	4	3	5	7	
		Small-pox ...	...	...	...	...	46	51	23	21	
		Plague ...	2,205	2,033	1,225	1,202	274	266	271	335	
		Fevers ...	51	53	19	15	10	10	6	7	
		Dysentery and Diarrhoea ...	...	...	...	...	...	...	1	...	
		Respiratory diseases ...	40	34	21	13	15	11	11	9	
		Injuries ...	1,179	1,011	128	115	62	60	57	53	
		All other causes ...									
		Total	3,648	3,237	1,493	1,441	411	401	374	432	
27	MUZAFFARGAHH.	Cholera ...	103	80	64	55	34	49	29	21	
		Small-pox ...	...	...	...	...	...	...	...	...
		Plague ...	1,793	1,600	1,084	1,168	359	343	199	146	
		Fevers ...	25	12	6	4	...	...	...	...
		Dysentery and Diarrhoea ...	11	9	1	1	...	...	...	...
		Respiratory diseases ...	1	4	44	34	24	16	13	6	
		Injuries ...	673	571	17	26	17	9	14	16	
		All other causes ...									
		Total	2,606	2,276	1,216	1,288	434	417	255	189	
28	DERA GHAZI KHAN.	Cholera ...	250	225	200	173	137	100	150	157	
		Small-pox ...	...	...	...	...	...	...	...	...
		Plague ...	...	...	...	...	...	...	...	...
		Fevers ...	519	689	862	759	350	317	129	77	
		Dysentery and Diarrhoea ...	20	34	31	20	25	13	20	13	
		Respiratory diseases ...	15	7	10	9	12	5	18	5	
		Injuries ...	...	...	5	8	6	3	...	...
		All other causes ...	350	269	115	78	...	...	14	...	
		Total	1,454	1,224	1,223	1,047	530	438	331	252	
Total for the Province—											
			Cholera ...	17	16	413	484	349	284	232	185
			Small-pox ...	6,379	5,767	6,507	6,188	2,999	2,840	1,239	1,199
			Plague ...	344	291	574	607	727	919	956	1,065
			Fevers ...	43,729	40,777	36,586	37,902	8,400	8,292	5,136	4,936
			Dysentery and Diarrhoea...	1,629	1,362	999	891	362	306	339	235
			Respiratory diseases ...	7,171	6,127	3,574	2,855	815	828	687	602
			Injuries ..	223	173	586	479	525	353	338	240
			All other causes ...	40,484	36,007	11,580	10,393	1,894	1,465	1,393	1,263
			Total	99,976	90,520	60,819	59,799	16,071	15,287	10,320	9,725
Population according to Census of 1911 ...				424,654	404,431	997,515	931,872	1,482,324	1,259,701	1,321,272	931,615
Ratio per 1,000 living for the Province—											
			Cholera ...	0.04	0.04	0.41	0.52	0.24	0.23	0.18	0.20
			Small-pox ...	15.02	14.26	6.52	6.64	2.02	2.25	0.94	1.29
			Plague ...	0.81	0.72	0.58	0.65	0.49	0.73	0.72	1.14
			Fevers ...	102.98	100.83	36.68	40.67	5.67	6.58	3.89	5.30
			Dysentery and Diarrhoea ..	3.84	3.37	1.00	0.96	0.24	0.24	0.26	0.25
			Respiratory diseases ...	16.89	15.15	3.58	3.06	0.55	0.66	0.52	0.65
			Injuries ...	0.53	0.43	0.59	0.51	0.35	0.28	0.26	0.26
			All other causes ...	95.33	89.03	11.61	11.15	1.28	1.16	1.05	1.36
			Total	235.43	223.82	60.97	64.17	10.84	12.14	7.81	10.44

NOTE.—The population of military cantonments by different ages cannot be

NOTE.—As the correct population of the different age periods according to the census of 1911 of the Punjab Province as at present constituted is not prior to the separation of the (new) Delhi Province,— vide Punjab Government

No. IV—CONCLUDED.

DISEASES IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1913.

9		10		11		12		13		14		15		16
15 YEARS AND UNDER 20 YEARS.		20 YEARS AND UNDER 30 YEARS.		30 YEARS AND UNDER 40 YEARS.		40 YEARS AND UNDER 50 YEARS.		50 YEARS AND UNDER 60 YEARS.		60 YEARS AND UPWARDS.		TOTAL.		
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	No.
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
...	
31	27	38	36	37	33	36	24	31	39	23	17	806	757	
5	2	7	6	6	4	2	7	3	4	5	7	42	37	
58	84	200	245	158	254	146	201	217	110	675	468	4194	4223	25
3	2	9	4	18	15	14	11	7	6	22	33	152	133	
35	22	24	18	36	13	19	8	23	12	43	29	287	179	
2	4	5	7	8	3	6	2	5	3	4	4	44	29	
15	28	34	33	32	42	63	39	59	121	253	225	2,084	1,815	
149	169	317	349	295	364	286	292	345	295	1,025	783	7,609	7,173	
3	5	4	6	3	3	4	5	1	5	...	3	24	39	
16	15	10	13	7	9	5	3	1	...	...	...	381	362	
...	
287	352	402	367	435	438	511	457	482	427	1,155	898	7,247	6,775	26
9	6	6	6	7	5	8	7	4	4	14	10	134	123	
...	1	4	...	2	2	...	1	2	...	...	...	9	4	
15	10	13	14	15	14	16	10	17	9	20	16	183	140	
57	54	67	62	65	62	91	73	91	79	461	419	2,253	1,988	
387	443	506	468	534	533	635	556	598	524	1,650	1,346	10,236	9,431	
...	
25	16	101	77	58	47	23	19	7	...	8	5	452	369	
...	
161	121	394	564	452	540	495	415	420	347	1,085	822	6,442	6,056	27
1	...	1	3	2	4	4	...	2	8	12	1	53	32	
...	1	...	2	2	...	...	...	3	2	10	3	27	18	
13	4	22	15	19	7	15	7	8	4	14	14	173	111	
10	15	35	53	39	47	33	28	31	11	35	19	904	795	
210	157	553	704	572	645	570	469	471	372	1,164	864	8,051	7,381	
1	...	...	...	...	1	...	...	...	...	...	...	1	1	
44	30	96	195	10	21	40	...	...	...	...	...	927	801	
...	
229	202	328	348	357	375	379	360	320	204	610	428	4,383	3,759	28
15	6	12	5	9	4	3	1	11	3	10	4	156	103	
8	2	...	3	...	...	9	8	20	15	66	30	153	79	
10	4	20	5	15	11	9	6	14	6	6	...	85	43	
10	5	19	11	52	31	41	12	49	60	62	85	712	551	
312	249	475	467	443	443	481	382	414	288	754	547	6,417	5,337	
252	206	598	416	533	377	486	257	226	190	161	129	3,267	2,544	
713	633	947	852	590	514	373	257	181	145	198	166	20,126	18,561	
994	844	1,525	1,429	1,199	1,220	1,098	1,007	815	786	709	768	8,941	8,936	
3,918	4,000	10,662	12,373	9,749	11,149	10,513	8,793	11,139	8,150	30,642	24,852	170,474	161,224	
316	196	451	333	438	308	483	326	428	308	800	555	6,245	4,820	
763	727	1,479	1,488	1,544	1,394	1,729	1,396	1,932	1,441	4,601	3,760	24,325	20,618	
301	226	524	370	498	285	424	196	366	149	429	240	4,214	2,711	
925	1,127	1,463	1,819	1,599	1,669	1,840	1,583	17,63	1,597	3,793	3,121	66,734	60,044	
8,182	7,959	17,649	19,080	16,150	16,916	16,946	13,815	16,880	12,766	41,333	33,591	304,326	279,458	
994,090	726,853	1,885,914	1,581,886	1,446,929	1,197,335	1,065,657	894,099	711,241	544,726	662,471	510,371	10,608,101	8,729,045	
0.25	0.28	0.32	0.26	0.37	0.31	0.46	0.29	0.32	0.35	0.24	0.25	0.31	0.29	
0.72	0.87	0.50	0.54	0.41	0.43	0.35	0.29	0.25	0.27	0.30	0.33	1.90	2.13	
1.00	1.16	0.81	0.90	0.83	1.02	1.03	1.13	1.15	1.44	1.07	1.50	0.84	1.02	
3.94	5.50	15.65	7.82	6.74	9.31	9.87	9.83	15.66	14.96	46.25	48.69	16.07	18.47	
0.32	0.27	0.24	0.21	0.30	0.26	0.45	0.36	0.60	0.57	1.21	1.09	0.59	0.55	
0.77	1.00	0.78	0.94	1.07	1.16	1.62	1.56	2.76	2.65	6.95	7.37	2.29	2.36	
0.30	0.31	0.28	0.23	0.34	0.24	0.40	0.22	0.51	0.27	0.65	0.47	0.40	0.31	
0.93	1.55	0.78	1.15	1.11	1.39	1.73	1.77	2.46	2.93	5.73	6.12	6.29	6.88	
8.23	10.95	9.36	12.06	11.16	14.13	15.90	15.45	23.73	23.44	62.39	65.82	28.69	32.01	

excluded, as it is not shown separately in the census returns.

available, the ratios shown in columns from 5 to 14 are calculated under the orders of Local Government on the population of the Punjab as constituted Notification No: 2943 S. dated 1st October 1912.

ANNUAL FORM No. V.

DEATHS REGISTERED ACCORDING TO CLASSES IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1913.

1	2	3					4					5					6
No.	DISTRICTS.	POPULATION ACCORDING TO CENSUS OF 1911.					NUMBER OF DEATHS REGISTERED.					RATIO OF DEATHS PER 1,000 OF POPULATION.					No.
		Muhammadans.	Hindus.	Native Christians.	Other classes.	Total.	Muhammadans.	Hindus.	Native Christians.	Other classes.	Total.	Muhammadans.	Hindus.	Native Christians.	Other classes.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	AMBALA DIVISION.																
1	Hissar ...	218,600	585,993	79	215	804,889	6,173	17,410	...	...	23,583	28.24	29.71	...	...	29.30	1
2	Rohtak ...	113,493	600,138	1,136	37	714,834	4,363	20,404	16	1	24,789	38.49	34.00	14.08	27.03	34.68	2
3	Gurgaon ...	235,653	492,684	687	143	729,167	8,818	19,850	3	11	28,682	37.42	40.29	4.37	76.92	39.34	3
4	Karnal ...	224,920	573,947	836	84	799,787	10,065	25,736	8	...	35,809	44.75	44.84	9.57	...	44.77	4
5	Ambala ...	188,252	443,202	745	354	632,553	7,192	16,781	9	131	24,113	38.20	37.86	12.08	370.06	38.12	5
6	Simla ...	4,775	27,093	533	2,569	34,970	162	611	7	4	784	33.93	22.55	13.13	1.56	22.42	6
	JULLUNDUR DIVISION.																
7	Kangra ...	38,770	723,570	221	4,125	766,686	866	19,483	1	...	20,350	22.34	26.93	4.52	...	26.54	7
8	Hoshiarpur ...	281,805	633,786	2,954	24	918,569	8,005	18,971	33	...	27,009	28.41	29.93	11.17	...	29.40	8
9	Jullundur ...	352,329	434,503	1,107	17	787,956	11,025	12,400	10	...	23,435	31.29	28.54	9.03	...	29.74	9
10	Ludhiana ...	176,043	340,261	731	157	517,192	4,882	10,170	18	...	15,070	27.73	29.89	24.62	...	29.14	10
11	Ferozepore ...	408,380	524,056	915	148	933,499	11,035	13,599	4	20	24,658	27.02	25.95	4.37	135.14	26.41	11
	LAHORE DIVISION.																
12	Lahore ...	619,735	377,928	15,972	4,107	1,017,742	23,693	10,803	352	2	34,850	38.23	28.58	22.04	0.49	34.24	12
13	Amritsar ...	408,571	466,202	4,189	349	879,311	14,710	16,657	106	2	31,475	36.00	35.73	25.30	5.73	35.80	13
14	Gurdaspur ...	407,701	401,628	23,068	164	832,561	11,743	12,610	583	7	24,943	28.80	31.40	25.27	42.68	29.96	14
15	Sialkot ...	599,340	317,942	45,727	270	963,279	19,876	9,473	1,399	198	30,946	33.16	29.79	30.59	733.33	32.13	15
16	Gujranwala ...	622,430	284,773	16,117	99	923,419	20,528	5,786	374	310	26,998	32.98	20.32	23.21	?	29.24	16
	RAWALPINDI DIVISION.																
17	Gujrat ...	650,893	94,171	463	107	745,634	18,746	2,637	10	18	21,411	28.80	28.00	21.60	168.22	28.72	17
18	Shahpur ...	572,565	106,156	8,419	226	687,366	14,097	2,089	183	173	16,542	24.62	19.68	21.74	765.49	24.07	18
19	Jhelum ...	449,553	54,364	151	127	504,195	12,202	1,312	1	...	13,515	27.14	24.13	6.62	...	26.80	19
20	Rawalpindi ...	442,090	64,209	932	411	507,642	15,510	2,266	13	77	17,866	35.08	35.29	13.95	187.35	35.19	20
21	Attock ...	470,155	45,071	31	29	515,286	14,368	1,034	2	26	15,430	30.56	22.94	64.52	896.55	29.94	21
22	Mianwali ...	299,971	41,238	91	77	341,377	8,114	1,048	...	3	9,165	27.05	25.41	...	38.96	26.85	22
	MULTAN DIVISION.																
23	Montgomery...	399,723	134,991	471	114	535,299	7,564	2,232	5	...	9,801	18.92	16.53	10.62	...	18.31	23
24	Lyallpur ...	524,288	301,398	31,877	148	857,711	13,398	6,703	796	28	20,925	25.55	22.24	24.97	189.19	24.40	24
25	Jhang ...	422,468	92,857	177	24	515,526	12,080	2,676	4	22	14,782	28.59	28.82	22.60	916.67	28.67	25
26	Multan ...	660,320	140,359	384	312	801,375	15,990	3,669	2	6	19,667	24.22	26.14	5.21	19.23	24.54	26
27	Muzaffargarh	494,915	74,481	40	25	569,461	13,720	1,706	...	6	15,432	27.72	22.91	...	240.00	27.10	27
28	D. G. Khan ...	442,234	57,550	25	51	499,860	10,253	1,337	...	164	11,754	23.18	23.23	...	?	23.51	28
Total for the Province.		10,729,972	8,434,583	158,078	14,513	19,337,146	319,183	259,453	3,939	1,209	583,784	29.75	30.76	24.92	*83.30	30.19	

*Figures incorrect due to misclassification.

ANNUAL FORM No. VI.

DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE DISTRICTS (RURAL
CIRCLES) OF THE PUNJAB DURING THE YEAR 1913.

DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE DISTRICTS

1	2	3	4	5	6	7	8	9	10					
No.	A.—RURAL CIRCLES.	Population according to Census of 1911.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory diseases.	INJURIES.					
									Suicide.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.
									Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
AMBALA DIVISION.														
1	Hissar ...	725,016	...	1,377	212	13,677	214	634	6	7	144	42	1	20
2	Rotak ...	654,115	7	89	1,862	12,451	167	929	6	22	208	20	1	257
3	Gurgaon ...	675,175	116	219	4,840	11,362	511	1,332	15	24	208	10	1	258
4	Karnal ...	723,742	10	478	3,053	18,383	248	1,482	2	6	204	25	13	250
5	Ambala ...	577,034	1	1,368	93	14,489	259	1,437	6	4	30	8	...	48
6	Simla ...	16,036	...	3	...	154	35	62	...	...	2	...	...	2
JULLUNDUR DIVISION.														
7	Kangra ...	760,548	18	87	9	12,620	356	1,893	1	6	205	28	...	240
8	Hoshiarpur ...	864,823	5	1,462	802	16,664	36	1,997	7	4	174	22	7	214
9	Jullundur ...	691,816	12	1,822	539	10,445	164	2,999	8	5	197	5	...	215
10	Ludhiana ...	448,172	22	1,254	251	5,228	89	1,083	10	6	128	6	...	150
11	Ferozepore ...	878,765	40	3,870	127	9,807	247	1,354	10	13	205	25	...	253
LAHORE DIVISION.														
12	Lahore ...	758,826	2,854	3,177	53	11,803	240	536	8	6	203	35	8	260
13	Amritsar ...	711,530	366	1,369	270	13,120	556	1,728	9	6	210	14	3	242
14	Gurdaspur ...	784,343	27	824	1,003	11,047	676	8,603	4	1	202	23	8	238
15	Sialkot ...	889,435	197	2,158	1,231	14,607	773	3,811	3	2	234	44	9	292
16	Gujranwala ...	838,879	19	820	1,425	16,778	90	522	5	12	372	167	8	564
RAWALPINDI DIVISION.														
17	Gujrat ...	702,886	350	1,970	29	10,788	241	1,933	1	1	196	32	4	234
18	Shahpur ...	639,789	2	1,904	10	8,843	116	476	2	2	250	43	4	301
19	Jhelum ...	481,307	12	437	51	8,374	131	804	5	3	186	26	...	220
20	Rawalpindi ...	459,639	19	341	18	10,958	1,870	627	...	...	213	25	...	238
21	Attock ...	496,291	1	1,719	4	9,987	31	528	2	...	174	28	...	204
22	Mianwali ...	316,243	...	256	...	6,635	116	201	1	...	99	7	1	108
MULTAN DIVISION.														
23	Montgomery ...	511,021	18	1,495	...	5,556	51	90	...	1	144	57	3	205
24	Lyallpur ...	838,133	9	2,976	1	11,526	313	828	3	1	265	29	9	307
25	Jhang ...	475,527	...	1,492	8	7,832	194	401	...	...	23	45	1	69
26	Multan ...	1,709,294	9	548	...	12,564	72	3	2	1	213	78	...	294
27	Muzaffargarh ...	547,005	...	813	...	12,013	71	33	1	1	205	71	...	278
28	Dera Ghazi Khan ...	463,304	2	1,654	...	7,692	212	194	6	6	77	30	...	119
Total of the Rural Circles ...		17,638,694	4,116	35,982	15,891	305,403	8,079	36,520	123	140	4,971	945	81	6,260

No. VI.

(RURAL CIRCLES) OF THE PUNJAB DURING THE YEAR 1913.

11	12	13								14		15
All other causes.	Total deaths from all causes.	RATIO OF DEATHS PER 1,000 OF POPULATION.								FROM ALL CAUSES.		No.
		Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	
16	17	18	19	20	21	22	23	24	25	26	27	28
4,286	20,600	...	1.90	0.29	18.86	0.30	0.87	0.28	5.91	28.41	36.63	1
6,526	22,288	0.01	0.14	2.85	19.03	0.26	1.42	0.39	9.98	34.07	47.09	2
7,934	26,572	0.17	0.32	7.17	16.83	0.76	1.97	0.38	11.75	39.36	58.02	3
7,913	31,807	0.01	0.66	4.22	25.40	0.34	2.05	0.35	10.92	43.95	46.60	4
4,272	21,967	0.001	2.37	0.16	25.11	0.45	2.49	0.08	7.40	38.07	39.63	5
131	387	...	0.19	...	9.60	2.18	3.87	0.12	8.17	24.13	23.72	6
4,992	20,215	0.02	0.11	0.01	16.59	0.47	2.49	0.32	6.56	26.58	31.07	7
4,000	25,180	0.01	1.69	0.93	19.27	0.04	2.31	0.25	4.63	29.12	37.36	8
4,125	20,321	0.02	2.63	0.78	15.10	0.24	4.33	0.31	5.96	29.37	33.69	9
4,823	12,900	0.05	2.80	0.56	11.67	0.20	2.42	0.33	10.76	28.78	43.33	10
7,589	23,287	0.05	4.40	0.14	11.16	0.28	1.54	0.29	8.64	26.50	37.59	11
6,321	25,244	3.76	4.19	0.07	15.55	0.32	0.71	0.34	8.33	33.27	35.62	12
7,125	24,776	0.51	1.92	0.38	18.44	0.78	2.43	0.34	10.01	34.82	45.84	13
782	23,200	0.03	1.05	1.28	14.08	0.86	10.97	0.30	1.00	29.58	37.30	14
4,798	27,867	0.22	2.43	1.38	16.42	0.37	4.28	0.33	5.39	31.33	36.71	15
4,179	24,397	0.02	0.98	1.70	20.00	0.11	0.62	0.67	4.98	29.08	32.61	16
4,209	19,754	0.50	2.80	0.04	15.35	0.34	2.75	0.33	5.99	28.10	29.78	17
3,594	15,246	0.003	2.98	0.02	13.82	0.18	0.74	0.47	5.62	23.83	27.40	18
2,576	12,605	0.02	0.91	0.11	17.40	0.27	1.67	0.46	5.35	26.19	30.51	19
1,542	15,613	0.04	0.74	0.04	23.84	4.07	1.36	0.52	3.35	33.97	30.65	20
2,460	14,934	0.002	3.46	0.01	20.12	0.06	1.06	0.41	4.96	30.09	27.69	21
1,190	8,506	...	0.81	...	20.98	0.37	0.64	0.34	3.76	26.90	26.64	22
1,858	9,273	0.04	2.93	...	10.87	0.10	0.18	0.40	3.64	18.15	28.05	23
4,761	20,721	0.01	3.55	0.001	13.75	0.37	0.99	0.37	5.68	24.72	25.69	24
3,212	13,208	...	3.14	0.02	16.47	0.41	0.84	0.15	6.75	27.78	27.68	25
3,254	16,744	0.01	0.77	...	17.71	0.10	0.004	0.41	4.59	23.61	27.18	26
1,491	14,699	...	1.49	...	21.96	0.13	0.06	0.51	2.73	26.87	28.10	27
1,051	10,924	0.004	3.57	...	16.60	0.46	0.42	0.26	2.27	23.58	23.16	28
110,984	523,235	0.23	2.04	0.90	17.31	0.46	2.07	0.35	6.29	29.66	25.03	

DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE

1	2	3	4	5	6	7	8	9	10					
No.	B.—TOWNS.	Population according to Census of 1911.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory diseases.	INJURIES.					
									Suicide.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.
									Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
HISSAR DISTRICT.														
1	Hissar	17,162	...	9	...	321	34	85	1	...	2	...	...	3
2	Hansi	14,576	...	54	3	132	29	57	1	...	1	...	1	3
3	Bhiwani	31,100	...	45	...	402	74	133	...	...	11	...	...	11
4	Sirsa	14,629	2	24	...	252	31	37	...	...	2	...	...	2
5	Fattehabad	2,406	...	2	...	48	1	6	...	...	...	...	...	...
ROHTAK DISTRICT.														
6	Rohtak	19,862	...	16	131	207	28	34	...	...	6	1	...	7
7	Jhajjar	10,617	...	4	1	88	30	50	...	...	4	2	1	7
8	Beri	7,798	...	...	1	98	25	69	...	...	1	...	...	1
9	Gohana	5,438	...	...	2	224	21	21	...	...	...	...	...	...
10	Bahadurgarh	4,990	...	1	7	120	4	10	...	1	...	...	...	1
11	Sonepat	12,014	...	15	...	183	24	28	...	2	5	...	...	7
GURGAON DISTRICT.														
12	Rewari	24,780	1	...	...	34	39	125	...	...	5	...	...	5
13	Palwal	9,485	3	3	119	82	35	55	1	...	6	...	...	7
14	Firozpur	5,719	...	1	...	88	16	11	1	...	2	3	...	6
15	Hodal	5,468	...	6	99	92	31	9	...	...	1	...	...	1
16	Ballabgarh	4,053	...	10	52	68	14	16	...	...	...	...	...	...
17	Faridabad	4,487	...	1	15	167	5	14	...	...	1	...	...	1
KARNAL DISTRICT.														
18	Karnal	21,018	1	8	15	491	73	92	1	...	9	...	...	10
19	Kaithal	12,912	53	27	...	464	23	44	...	...	6	1	...	7
20	Panipat	26,342	15	4	485	312	65	183	...	...	16	...	1	17
21	Shahabad	11,054	...	20	...	91	28	61	...	...	5	1	...	6
22	Thanesar	4,719	...	...	...	96	34	30	...	...	3	...	...	3
AMBALA DISTRICT.														
23	Ambala	24,493	...	5	2	347	59	137	...	...	2	...	...	2
24	Jagadhri	12,045	1	...	...	285	36	33	...	...	2	...	...	2
25	Buriya	4,272	...	3	...	126	9	5	...	...	...	...	...	...
26	Sadhaura	7,774	...	18	...	117	15	34	...	...	...	...	...	...
27	Rupar	6,935	...	18	...	87	23	35	...	...	...	...	...	...
SIMLA DISTRICT.														
28	Simla	18,934	...	13	...	220	5	50	...	...	...	...	...	...
KANGRA DISTRICT.														
29	Kangra	3,620	...	...	...	22	14	23	...	...	...	...	...	...
30	Dharmasala	2,518	...	...	...	13	1	15	...	...	...	...	...	...
HOSHIARPUR DISTRICT.														
31	Hoshiarpur	16,980	...	67	1	183	11	96	1	...	6	...	1	8
32	Khanpur	2,523	...	12	...	35	3	21	...	...	...	...	...	...
33	Hariana	5,395	1	11	...	77	2	12	...	...	2	...	...	2
34	Garhdiwala	3,093	...	...	...	63	1	24	...	...	...	...	...	...
35	Dasuya	3,597	...	37	...	72	1	14	...	...	1	...	...	1
36	Tanda Umar	7,016	26	46	14	155	...	23	...	...	3	...	...	3
37	Miani	4,870	...	42	31	62	...	17	...	...	...	...	...	...
38	Mukerian	2,053	...	...	6	45	...	13	...	...	2	...	...	2
39	Una	4,178	...	38	1	73	1	17	...	...	...	...	...	...
40	Anandpur	4,041	...	1	...	49	1	12	...	...	1	...	...	1

No. VI.

TOWNS OF THE PUNJAB DURING THE YEAR 1913.

11	12	13										14
All other causes.	Total deaths from all causes.	RATIO OF DEATHS PER 1,000 OF POPULATION.										No.
		Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diar- rhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.		
										For the year.	Mean ratio of previous five years.	
16	17	18	19	20	21	22	23	24	25	26	27	28
237	689	...	0.52	...	18.70	1.98	4.95	0.17	13.81	40.15	41.59	1
187	465	...	3.70	0.21	9.06	1.99	3.91	0.21	12.83	31.90	47.24	2
538	1,203	...	1.45	...	12.93	2.38	4.28	0.35	17.30	38.68	42.55	3
206	554	0.14	1.64	...	17.23	2.12	2.53	0.14	14.08	37.87	47.19	4
15	72	...	0.83	...	19.95	0.42	2.49	...	6.23	29.93	35.49	5
360	783	...	0.81	6.60	10.42	1.41	1.71	0.35	18.13	39.42	35.81	6
216	396	...	0.33	0.09	8.29	2.83	4.71	0.66	20.34	37.30	39.05	7
87	281	...	...	0.13	12.57	3.21	8.85	0.13	11.16	36.03	47.86	8
112	380	...	...	0.37	41.19	3.86	3.86	...	20.60	69.88	46.12	9
73	216	...	0.20	1.40	24.05	0.80	2.00	0.20	14.63	43.29	56.39	10
188	445	...	1.25	...	15.23	2.00	2.33	0.58	15.65	37.04	62.78	11
424	628	0.04	...	...	1.37	1.57	5.04	0.20	17.11	25.34	47.13	12
230	534	0.32	0.32	12.55	8.65	3.69	5.80	0.74	24.25	56.30	91.91	13
71	193	...	0.17	...	15.39	2.80	1.92	1.05	12.41	33.75	59.98	14
84	322	...	1.10	18.11	16.83	5.67	1.65	0.18	15.36	58.89	79.08	15
32	192	...	2.47	12.83	16.78	3.45	3.95	...	7.90	47.37	63.06	16
38	241	...	0.22	3.34	37.22	1.11	3.12	0.22	8.47	53.71	60.00	17
296	986	0.65	0.38	0.71	23.36	3.47	4.38	0.48	14.08	46.91	51.69	18
204	822	4.10	2.09	...	35.94	1.78	3.41	0.51	15.80	63.66	50.43	19
485	1,536	0.57	0.15	18.41	11.84	2.47	6.95	0.65	18.41	59.45	52.18	20
206	412	...	1.81	...	8.23	2.53	5.52	0.54	18.64	37.27	48.04	21
53	216	...	...	...	20.34	7.20	6.36	0.64	11.23	45.77	44.29	22
287	839	...	0.20	0.08	14.17	2.41	5.59	0.08	11.72	34.25	35.13	23
229	586	0.08	...	...	23.66	2.99	2.74	0.17	19.01	48.65	41.03	24
66	209	...	0.70	...	29.49	2.11	1.17	...	15.45	48.92	45.79	25
102	286	...	2.32	...	15.05	1.93	4.37	...	13.12	36.79	44.94	26
63	226	...	2.60	...	12.55	3.32	5.05	...	9.08	32.59	40.26	27
109	397	...	0.69	...	11.62	0.26	2.64	...	5.76	20.97	22.70	28
31	90	...	...	...	6.08	3.87	6.35	...	8.56	24.86	29.50	29
16	45	...	...	...	5.16	0.40	5.96	...	6.35	17.87	20.73	30
181	547	...	3.95	0.06	10.78	0.65	5.65	0.47	10.66	32.21	38.29	31
28	99	...	4.76	...	13.87	1.19	8.32	...	11.10	39.24	41.70	32
23	128	0.19	2.04	...	14.27	0.37	2.22	0.37	4.26	23.73	36.70	33
5	93	...	...	...	20.37	0.32	7.76	...	1.62	30.07	36.79	34
27	152	...	10.29	...	20.02	0.28	3.89	0.28	7.51	42.26	58.60	35
24	291	3.71	6.56	2.00	22.09	...	3.28	0.43	3.42	41.48	46.98	36
26	178	...	8.62	6.37	12.73	...	3.49	...	5.34	36.55	40.57	37
26	92	...	...	2.92	21.92	...	6.33	0.97	12.66	44.81	74.43	38
35	165	...	9.10	0.24	17.47	0.24	4.07	...	8.38	39.49	41.65	39
20	84	...	0.25	...	12.13	0.25	2.97	0.25	4.95	20.79	42.46	40

DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE

1	2	3	4	5	6	7	8	9	10					
No.	B.—Towns.	Population according to Census of 1911.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.	INJURIES.					
									Suicide.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.
									Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
JULLUNDUR DISTRICT.														
41	Jullundur	55,354	33	250	1	579	123	416	...	...	16	...	1	17
42	Kartarpur	8,631	3	25	...	107	20	66	...	...	4	...	...	4
43	Banga	4,602	...	5	10	44	9	19	...	...	2	...	...	2
44	Rahon	6,292	...	35	2	132	6	20	...	...	5	...	...	5
45	Phillaur	5,224	1	7	...	72	5	43	...	...	1	...	...	1
46	Nurmahal	7,178	1	25	...	64	14	57	...	...	5	...	...	5
47	Nakodar	8,859	1	15	...	95	11	52	...	...	4	...	...	4
LUDHIANA DISTRICT.														
48	Ludhiana	43,152	1	71	...	656	55	203	1	1	7	...	...	9
49	Jagraon	15,039	...	119	...	188	23	51	...	1	3	...	...	4
50	Raekot	7,510	...	31	...	49	5	44	...	...	5	1	...	6
51	Khanna	3,319	...	20	...	43	...	15	...	...	2	...	...	2
FEROZEPORE DISTRICT.														
52	Ferozepore	24,678	4	41	23	226	20	80	...	...	8	...	...	8
53	Zira	4,378	...	10	...	52	1	8	1	...	3	...	...	4
54	Dharmkot	5,859	1	9	...	26	3	28	...	...	...	1	...	1
55	Muktsar	8,834	...	9	2	86	6	14	...	...	2	...	...	2
56	Fazilka	10,985	2	16	...	119	14	47	...	...	...	...	...	...
LAHORE DISTRICT.														
57	Lahore	210,271	166	123	4	4,473	397	1,234	8	...	66	2	1	77
58	Chunian	7,151	68	23	...	53	19	19	...	...	2	...	...	2
59	Khudian	2,992	7	13	2	25	...	3	...	...	...	...	1	1
60	Kasur	24,783	106	67	2	279	15	67	...	...	11	1	...	12
61	Khem Karn	5,732	10	33	...	64	5	17	...	...	2	...	1	3
62	Patti	7,987	16	47	...	97	19	23	...	...	2	...	...	2
AMRITSAR DISTRICT.														
63	Amritsar	151,339	85	208	150	2,875	253	1,407	4	...	74	1	2	81
64	Majitha	5,223	...	3	...	77	21	19	...	...	1	...	...	1
65	Jandiala	6,959	3	16	...	112	10	13	...	...	3	...	1	4
66	Tarn Taran	4,260	8	6	...	41	5	29	...	...	...	...	...	...
GURDASPUR DISTRICT.														
67	Gurdaspur	5,133	12	6	3	66	10	52	1	...	6	1	...	8
68	Dinanagar	4,154	2	17	13	108	9	45	...	...	...	...	...	...
69	Pathankot	7,007	...	19	11	76	10	73	...	...	4	1	...	5
70	Dalhousie	938	...	...	...	5	2	11	...	...	1	...	...	1
71	Batala	26,430	14	84	6	465	47	307	1	...	12	...	1	14
72	Dera Nanak	4,556	...	9	...	55	13	49	...	...	3	...	...	3
SIALKOT DISTRICT.]														
73	Sialkot	48,595	681	82	29	536	104	463	...	...	25	1	1	27
74	Daska	6,046	...	8	...	51	8	28	...	...	1	...	...	1
75	Jamke	3,542	1	7	2	35	11	18	...	...	3	...	...	3
76	Pasrur	7,564	1	34	...	62	20	46	...	...	6	...	...	6
77	Zaffarwal	3,633	...	4	...	16	7	50	...	...	1	...	...	1
78	Narowal	4,464	...	33	...	63	10	50	...	...	4	1	...	5
GUJRANWALA DISTRICT.														
79	Gujranwala	28,637	41	23	1	574	34	88	1	...	12	2	2	17
80	Wazirabad	17,146	19	1	8	349	18	55	...	...	4	...	2	6
81	Eminabad	5,526	1	...	...	136	6	20	...	...	1	1	...	2
82	Kila Didar Singh	2,210	...	...	...	25	...	8	...	...	1	1	1	3
83	Akalgarh	3,943	...	5	...	24	2	7	...	...	1	...	1	2
84	Ramnagar	5,256	...	1	...	74	4	17	...	...	4	1	...	5
85	Sohdra	4,666	...	2	...	107	...	3	...	...	1	...	...	1
86	Hafizabad	5,742	...	3	41	62	4	14	...	...	2	...	...	2
87	Khangah Dogran	1,267	...	6	...	6	...	3	...	...	1	...	...	1
88	Pindi Bhattian	3,631	...	2	70	39	...	3	...	...	...	...	...	...
89	Sangla	980	...	2	4	15	1	3	...	...	...	...	...	...
90	Sharakpur	4,482	1	4	...	43	3	6	...	...	2	...	...	2
91	Shahkot	1,054	...	...	...	4	...	4	...	...	...	...	...	...

No VI—CONTINUED.

TOWNS OF THE PUNJAB DURING THE YEAR 1913—CONTINUED.

11	12	13										14
All other causes.	Total deaths from all causes.	RATIO OF DEATHS PER 1,000 OF POPULATION.										No.
		Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.		
										For the year.	Mean ratio of previous five years.	
16	17	18	19	20	21	22	23	24	25	26	27	28
412	1 831	0.60	4.52	0.02	10.46	2.22	7.52	0.31	7.44	33.08	31.08	41
68	283	0.35	2.90	...	12.40	2.32	7.65	0.46	6.72	32.79	43.75	42
33	122	...	1.09	2.17	9.56	1.96	4.13	0.43	7.17	26.51	38.94	43
37	237	...	5.56	0.32	20.98	0.95	3.18	0.79	5.88	37.67	40.37	44
64	193	0.19	1.34	...	13.78	0.96	8.23	0.19	12.25	36.94	44.72	45
40	206	0.14	3.48	...	8.92	1.95	7.94	0.70	5.57	28.70	28.25	46
64	242	0.11	1.69	...	10.72	1.24	5.87	0.45	7.22	27.32	29.10	47
291	1,286	0.02	1.65	...	15.20	1.27	4.70	0.21	6.74	29.80	33.91	48
157	542	...	7.91	...	12.50	1.53	3.39	0.27	10.44	36.04	38.62	49
109	244	...	4.13	...	6.52	0.67	5.86	0.80	14.51	32.49	43.81	50
18	98	...	6.03	...	12.96	...	4.52	0.60	5.42	29.53	50.63	51
151	553	0.16	1.66	0.93	9.16	0.81	3.24	0.32	6.12	22.41	26.36	52
41	116	...	2.28	...	11.28	0.23	1.83	0.92	9.37	26.50	43.44	53
74	142	0.17	1.54	...	4.44	0.51	4.78	0.17	12.63	24.24	41.75	54
92	211	...	1.02	0.23	9.74	0.68	1.58	0.23	10.41	23.88	25.27	55
151	349	0.18	1.46	...	10.83	1.27	4.28	...	13.75	31.77	44.28	56
1,538	8,012	0.79	0.58	0.02	21.27	1.89	5.87	0.37	7.31	38.10	33.69	57
85	269	9.51	3.22	...	7.41	2.66	2.66	0.23	11.89	37.62	45.42	58
20	71	2.34	4.34	0.67	8.36	...	1.00	0.33	6.68	23.73	45.12	59
222	770	4.28	2.70	0.08	11.26	0.61	2.70	0.43	8.96	31.07	33.77	60
71	208	1.74	6.63	...	11.17	0.87	2.97	0.52	12.39	36.29	30.64	61
72	276	2.00	5.88	...	12.14	2.33	2.88	0.25	9.01	34.56	42.67	62
1,137	6,196	0.56	1.37	0.99	19.00	1.67	9.20	0.54	7.51	40.94	50.44	63
71	192	...	0.57	...	14.74	4.02	3.64	0.19	13.59	36.76	49.55	64
35	193	0.43	2.30	...	16.09	1.44	1.86	0.57	5.03	27.73	40.03	65
29	118	1.88	1.41	...	9.62	1.17	6.81	...	6.81	27.70	40.28	66
16	173	2.34	1.17	0.58	12.86	1.95	10.13	1.56	3.12	33.70	34.48	67
15	209	0.48	4.09	3.13	26.00	2.17	10.83	...	3.61	50.31	46.85	68
27	221	...	2.71	1.57	10.85	1.43	10.42	0.71	3.85	31.54	39.73	69
1	20	...	...	...	5.33	2.13	11.73	1.07	1.07	21.32	59.49	70
39	976	0.53	3.18	0.23	17.59	1.78	11.62	0.53	1.48	36.93	43.47	71
15	144	...	1.98	...	12.07	2.85	10.76	0.66	3.29	31.61	26.43	72
435	2,357	14.01	1.69	0.60	11.03	2.14	9.53	0.56	8.95	48.50	34.40	73
37	133	...	1.32	...	8.44	1.32	4.63	0.17	6.12	22.00	30.10	74
27	104	0.28	1.98	0.56	9.88	3.11	5.08	0.85	7.62	29.36	41.61	75
35	204	0.13	4.49	...	8.20	2.64	6.08	0.79	4.63	26.97	36.52	76
28	106	...	1.10	...	4.40	1.93	13.76	0.28	7.71	29.18	47.07	77
14	175	...	7.39	...	14.11	2.24	11.20	1.12	3.14	39.20	38.71	78
227	1,005	1.43	0.80	0.03	20.04	1.19	3.07	0.59	7.93	35.09	32.92	79
101	557	1.11	0.06	0.47	20.35	1.05	3.21	0.35	5.89	32.49	30.41	80
45	210	0.18	...	...	24.61	1.09	3.62	0.36	8.14	38.00	30.44	81
9	45	...	...	...	11.31	...	3.62	1.36	4.07	20.36	29.77	82
8	48	...	1.27	...	6.09	0.51	1.78	0.51	2.03	12.17	20.54	83
50	151	...	0.19	...	14.08	0.76	3.23	0.95	9.51	28.73	42.16	84
14	127	...	0.43	...	22.93	...	0.64	0.21	3.00	27.22	26.75	85
41	167	...	0.52	7.14	10.80	0.70	2.44	0.35	7.14	29.08	29.12	86
8	24	...	4.74	...	4.74	...	2.37	0.79	6.31	18.94	18.00	87
16	130	...	0.55	19.28	10.74	...	0.83	...	4.41	35.80	42.03	88
2	27	...	2.04	4.08	15.31	1.02	3.06	...	2.04	27.55	62.24	89
35	94	0.22	0.89	...	9.59	0.67	1.34	0.45	7.81	20.97	38.02	90
8	16	...	...	...	3.80	...	3.80	...	7.59	15.18	Not available.	91

DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE

1	2	3	4	5	6	7	8	9	10					
No.	B.—TOWNS.	Population according to census of 1911.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	INJURIES.					
									Suicide.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Rabies.	Total.
									Males.	Females.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
GUJRAT DISTRICT.														
92	Gujrat	18,692	172	9	4	304	46	143	...	...	3	...	...	3
93	Jalalpur	11,615	35	34	...	141	19	108	...	...	10	...	...	10
94	Kunjah	7,090	28	17	4	86	12	54	...	...	2	...	...	2
95	Dinga	5,351	...	...	...	31	5	53	...	...	2	...	...	2
SHAHPUR DISTRICT.														
96	Shahpur	8,739	...	6	...	53	8	6	...	...	1	...	...	1
97	Sahiwal	7,658	...	8	...	132	7	2	...	...	2	1	...	3
98	Bhera	15,202	...	8	5	253	19	30	...	...	8	...	...	8
99	Miani	5,819	...	20	...	113	7	18	...	...	2	...	...	2
100	Khushab	10,159	6	1	...	130	26	21	1	...	2	...	...	3
JHELUM DISTRICT.														
101	Jhelum	12,298	...	17	251	102	22	64	...	1	12	...	...	13
102	Pind Dadan Khan	10,590	4	3	...	223	51	26	...	...	7	1	...	8
RAWALPINDI DISTRICT.														
103	Rawalpindi	46,642	3	16	276	888	116	452	1	...	31	1	1	34
104	Murree	1,361	...	...	...	21	2	7	...	...	2	...	...	2
ATTOCK DISTRICT.														
105	Pindigheb	9,045	...	5	1	157	3	23	...	...	1	...	...	1
106	Hazro	9,950	1	6	4	90	6	36	...	...	1	...	...	1
MIANWALI DISTRICT.														
107	Mianwali	6,224	...	1	...	85	10	16	...	...	2	...	...	2
108	Bhakkar	5,388	...	4	...	146	2	5	...	...	1	...	...	1
109	Isa Khel	6,868	...	12	...	81	22	8	...	...	2	...	...	2
110	Kalabagh	6,654	...	5	...	112	18	12	...	...	5	...	...	5
MONTGOMERY DISTRICT.														
111	Montgomery	8,129	...	10	...	60	3	14	...	...	2	...	...	2
112	Kamalia	8,237	...	21	...	135	7	2	...	...	2	...	...	2
113	Pakpattan	7,912	...	5	...	130	5	4	...	...	10	...	...	10
LYALPUR DISTRICT.														
114	Lyailpur	19,578	...	4	1	123	5	26	...	...	2	...	...	2
JHANG DISTRICT.														
115	Jhang-Maghiana	25,914	...	28	...	450	71	31	...	...	2	1	...	3
116	Chiniot	14,085	...	43	71	135	20	34	...	...	...	1	...	1
MULTAN DISTRICT.														
117	Multan	85,747	53	183	...	1,321	165	8	...	...	25	1	...	26
118	Shujabad	6,334	1	12	...	137	20	2	...	...	3	...	...	3
MUZAFFARGARH DISTRICT.														
119	Muzaffargarh	4,119	...	1	...	98	1	2	...	...	3	...	...	3
120	Khaugarh	3,349	...	4	...	86	6	2	...	...	2	...	...	2
121	Alipur	3,312	...	1	...	56	1	4	...	...	...	...	...	...
122	Leiah	8,173	...	2	...	154	5	2	...	...	...	...	...	...
123	Karor	3,503	...	...	...	91	1	2	...	...	1	...	...	1
DERA GHAZI KHAN DISTRICT.														
124	Dera Ghazi Khan	16,853	...	26	...	102	22	12	1	...	3	...	...	4
125	Jampur	6,517	...	9	...	94	6	8	...	...	2	...	...	2
126	Dajal	6,893	...	14	...	114	9	10	...	...	1	...	...	1
127	Rajanpur	3,704	...	19	...	67	10	8	...	...	...	2	...	2
128	Kot Mithan	2,589	...	6	...	73	...	...	...	...	...	...	...	...
Total		1,698,452	1,695	2,705	1,986	26,295	2,986	8,423	26	6	582	31	20	665
Total of the Province		19,337,146	5,811	38,687	17,877	331,698	11,065	44,943	149	146	5,553	976	101	6,925

No. VI—CONCLUDED.

TOWNS OF THE PUNJAB DURING THE YEAR 1913—CONCLUDED.

11	12	13										14
All other causes.	Total deaths from all causes.	[RATIO OF DEATHS PER 1,000 OF POPULATION.]										No.
		Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.		
										For the year.	Mean ratio of previous five years.	
16	17	18	19	20	21	22	23	24	25	26	27	28
161	842	9.20	0.48	0.21	16.26	2.46	7.65	0.16	8.61	45.05	36.25	92
85	432	3.01	2.93	...	12.14	1.64	9.30	0.86	7.32	37.19	33.01	93
70	273	3.95	2.40	0.56	12.13	1.69	7.62	0.28	9.87	38.50	29.42	94
19	110	...	...	...	5.79	0.93	9.90	0.37	3.55	20.56	24.48	95
28	102	...	0.69	...	6.06	0.92	0.69	0.11	3.20	11.67	21.19	96
85	237	...	1.04	...	17.24	0.91	0.26	0.39	11.10	30.95	45.99	97
133	456	...	0.53	0.33	16.64	1.25	1.97	0.53	8.75	30.00	54.05	98
47	207	...	3.44	...	19.42	1.20	3.09	0.34	8.08	35.57	52.66	99
107	294	0.59	0.10	...	12.80	2.56	2.07	0.30	10.53	28.94	39.67	100
74	543	...	1.38	20.41	8.29	1.79	5.20	1.06	6.02	44.15	31.08	101
52	367	0.38	0.28	...	21.06	4.82	2.46	0.76	4.91	34.66	43.78	102
431	2,216	0.06	0.34	5.92	19.04	2.49	9.69	0.73	9.24	47.51	34.70	103
5	37	...	...	...	15.43	1.47	5.14	1.47	3.67	27.19	30.27	104
63	253	...	0.55	0.11	17.36	0.33	2.54	0.11	6.97	27.97	31.84	105
99	243	0.10	0.60	0.40	9.05	0.60	3.62	0.10	9.95	24.42	30.87	106
19	133	...	0.16	...	13.66	1.61	2.57	0.32	3.05	21.37	22.94	107
42	200	...	0.74	...	27.10	0.37	0.93	0.19	7.80	37.12	41.35	108
11	136	...	1.75	...	11.79	3.20	1.16	0.29	1.60	19.80	27.98	109
38	190	...	0.75	...	16.83	2.71	1.80	0.75	5.71	28.55	35.10	110
27	116	...	1.23	...	7.38	0.37	1.72	0.25	3.32	14.27	20.96	111
62	229	...	2.55	...	16.39	0.85	0.24	0.24	7.53	27.80	38.36	112
29	183	...	0.63	...	16.43	0.63	0.51	1.26	3.67	23.13	34.33	113
43	204	...	0.20	0.05	6.28	0.26	1.33	0.10	2.20	10.42	16.68	114
429	1,012	...	1.08	...	17.37	2.74	1.20	0.12	16.55	39.05	35.11	115
258	562	...	3.05	5.04	9.58	1.42	2.41	0.07	18.32	39.90	44.83	116
934	2,690	0.62	2.13	...	15.41	1.92	0.09	0.30	10.89	31.37	35.22	117
58	233	0.16	1.89	...	21.63	3.16	0.32	0.47	9.16	36.79	36.53	118
17	122	...	0.24	...	23.79	0.24	0.49	0.73	4.13	29.62	31.90	119
36	136	...	1.19	...	25.68	1.79	0.60	0.60	10.75	40.61	41.50	120
46	108	...	0.30	...	16.91	0.30	1.21	...	13.89	32.61	39.31	121
61	224	...	0.24	...	18.84	0.61	0.24	...	7.46	27.41	34.90	122
48	143	...	...	...	25.98	0.29	0.57	0.29	13.70	40.82	39.51	123
71	237	...	1.54	...	6.05	1.31	0.71	0.24	4.21	14.06	34.50	124
54	173	...	1.38	...	14.42	0.92	1.23	0.31	8.29	26.55	34.86	125
51	199	...	2.03	...	16.54	1.31	1.45	0.15	7.40	28.87	31.92	126
23	129	...	5.13	...	18.09	2.70	2.16	0.54	6.21	34.83	40.98	127
13	92	...	2.32	...	28.20	...	...	...	5.02	35.53	55.93	128
15,754	60,549	1.00	1.59	1.17	15.48	1.76	4.96	0.39	9.30	35.65	38.91	
126,778	583,784	0.30	2.00	0.92	17.15	0.57	2.32	0.36	6.56	30.19	35.37	

APPENDIX TO ANNUAL FORM No. VI B.

DEATHS REGISTERED IN THE CANTONMENTS OF THE PUNJAB DURING
THE YEAR 1913.

No.	CANTONMENTS.	Population according to the Census of 1911.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	INJURIES.					All other causes.	Total deaths from all causes.	Ratios of deaths per 1,000 of population.	Total births registered during the year.	Ratios of births per 1,000 of population.	No.
									Suicide.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Total.						
									Males.	Females.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Ambala ...	54,223	...	3	...	795	32	83	1	...	5	...	6	478	1,397	26	1,159	21	1
2	Kasauli ...	3,194	1	1	...	29	...	...	...	...	2	...	2	39	72	23	69	22	2
3	Dagshai ...	2,032	...	...	...	1	3	...	...	...	...	...	...	40	44	22	53	26	3
4	Sabathu ...	1,847	...	1	...	28	4	3	...	...	...	...	...	19	55	30	41	22	4
5	Jatogh ...	471	...	...	...	2	1	...	...	...	...	...	...	4	7	15	8	17	5
6	Dharmsala ...	3,700	...	...	...	46	5	...	...	...	...	...	...	6	57	15	124	34	6
7	Jullundur ...	13,964	...	2	...	93	5	4	1	...	2	...	3	69	176	13	155	11	7
8	Ferozepore ...	26,158	1	1	...	262	22	5	...	...	1	1	2	105	398	15	760	29	8
9	Lahore ...	18,416	7	3	...	243	19	24	...	...	3	...	3	82	381	21	269	15	9
10	Amritsar ...	1,417	...	...	...	11	3	3	...	...	...	...	...	8	25	18	36	25	10
11	Dalhousie ...	644	...	...	...	1	...	...	...	...	1	...	1	3	5	8	20	31	11
12	Bakloh ...	3,566	...	...	...	18	...	...	...	...	...	...	...	...	18	5	65	18	12
13	Sialkot ...	16,274	15	...	1	53	33	102	...	...	1	...	1	80	285	18	265	16	13
14	Jhelum ...	7,380	...	...	...	12	...	...	...	...	...	...	...	7	19	3	15	2	14
15	Rawalpindi ...	39,841	...	1	26	475	14	...	1	...	4	...	5	72	593	15	630	16	15
16	Campbellpur ...	3,357	...	...	...	12	...	...	...	...	2	...	2	12	26	8	20	6	16
17	Murree ...	344	...	...	...	11	...	...	...	...	...	...	...	7	18	52	19	55	17
18	Attock ...	630	...	...	...	1	...	...	...	...	...	...	...	...	1	2	1	2	18
19	Multan ...	13,496	...	...	...	77	...	...	...	1	7	...	8	44	129	10	135	10	19
	TOTAL ...	210,954	24	12	27	2,170	141	224	3	1	28	1	33	1,075	3,706	18	3,844	18	...

ANNUAL FORM No. VII.

DEATHS REGISTERED FROM CHOLERA IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1913.

1	2	3	4	5														6			7			8	9
No.	DISTRICTS.	CIRCLES OF REGISTRATION.		VILLAGES.		MONTHS.												TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for previous five years.	No.
		Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
AMBALA DIVISION.																									
1	Hissar ...	27	1	963	...	...	...	...	2	...	...	...	...	...	...	...	...	1	1	2	0·002	0·002	0·002	0·12	1
2	Rohtak ...	19	1	731	1	...	...	...	...	...	...	...	7	...	...	...	...	3	4	7	0·01	0·01	0·01	0·19	2
3	Gurgaon ..	24	11	1,367	16	...	...	...	...	...	1	28	29	61	1	...	...	62	58	120	0·16	0·17	0·16	0·38	3
4	Karnal ...	25	4	1,382	2	...	...	...	...	...	9	9	41	20	...	...	...	47	32	79	0·11	0·09	0·10	0·37	4
5	Ambala ...	19	2	1,715	1	...	...	...	...	...	...	1	1	...	...	...	...	2	...	2	0·01	...	0·003	0·12	9
6	Simla ...	3	...	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·21	6
JULLUNDUR DIVISION.																									
7	Kangra ...	17	2	713	2	...	...	...	...	...	8	2	...	8	...	...	...	10	8	18	0·03	0·02	0·02	0·05	7
8	Hoshiarpur ...	24	3	2,108	3	...	...	...	...	...	...	...	18	14	...	...	...	18	14	32	0·04	0·03	0·03	0·11	8
9	Jullundur ...	17	10	1,215	5	...	...	...	...	1	4	16	23	7	...	...	...	28	23	51	0·06	0·07	0·06	0·23	9
10	Ludhiana ...	15	2	853	6	...	...	...	...	...	2	21	...	...	...	...	...	11	12	23	0·04	0·05	0·04	0·17	10
11	Ferozepore ...	24	10	1,500	16	...	...	...	...	...	1	27	17	1	1	...	...	20	27	47	0·04	0·07	0·05	0·25	11
LAHORE DIVISION.																									
12	Lahore ...	27	27	1,194	328	...	...	...	42	185	120	820	1,612	448	...	...	...	1,889	1,338	3,227	3·25	3·07	3·17	0·35	12
13	Amritsar ...	15	14	1,039	53	...	...	...	...	47	154	98	91	65	7	...	...	276	186	462	0·56	0·48	0·53	0·21	13
14	Gurdaspur ...	22	8	2,238	6	...	...	...	...	...	11	3	19	21	1	...	...	27	28	55	0·06	0·08	0·07	0·09	14
15	Sialkot ...	21	6	2,349	50	...	...	...	...	...	8	...	559	307	6	...	...	450	430	880	0·35	0·99	0·91	0·24	15
16	Gujranwala ..	29	10	1,736	12	...	...	...	...	...	...	4	43	34	...	...	...	47	34	81	0·09	0·08	0·09	0·09	16
RAWALPINDI DIVISION.																									
17	Gujrat ...	15	11	1,326	57	...	...	...	...	...	...	8	388	189	...	...	...	298	287	585	0·74	0·83	0·78	0·05	17
18	Shahpur ...	23	3	1,055	2	...	...	...	...	...	...	...	...	7	1	...	...	7	1	8	0·02	0·003	0·01	0·10	18
19	Jhelum ...	14	3	898	3	...	...	...	...	...	...	...	6	7	3	...	...	12	4	16	0·05	0·02	0·03	0·45	19
20	Rawalpindi ...	13	3	1,177	7	...	...	...	...	2	2	9	9	...	...	...	...	13	9	22	0·05	0·04	0·04	0·41	20
21	Attock ...	13	2	628	1	...	...	...	...	...	1	...	1	...	...	...	...	1	1	2	1·003	0·004	0·003	0·33	21
22	Mianwali ..	15	...	396	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·30	22
MULTAN DIVISION.																									
23	Montgomery...	17	4	1,348	4	...	...	...	...	...	...	7	11	...	...	...	...	12	6	18	0·04	0·02	0·03	0·04	23
24	Lyallpur ..	19	2	1,278	4	...	...	...	...	...	3	1	3	2	...	...	...	8	1	9	0·02	0·002	0·01	0·17	24
25	Jhang ...	13	...	955	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·07	25
26	Multan ...	18	6	1,353	9	...	...	...	...	...	...	...	7	56	...	...	...	24	39	63	0·06	0·11	0·08	0·08	26
27	Muzaffargarh	23	...	860	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·19	27
28	D. G. Khan ...	21	1	707	2	...	...	...	...	...	1	1	...	...	...	...	...	1	1	2	0·003	0·004	0·004	0·22	28
Total for the Province.		532	146	33,112	590	...	...	...	44	235	325	1,655	2,885	1,247	20	...	...	3,267	2,544	5,811	0·31	0·29	0·30	0·19	

DEATHS REGISTERED FROM SMALL-POX IN THE DISTRICTS

1	2	3	4	5									
No.	DISTRICTS.	CIRCLES OF REGIS- TRATION.		VILLAGES.		MONTHS.							
		Number in each dis- trict.	Number from which deaths from small- pox were reported.	Number in each dis- trict.	Number from which deaths from small- pox were reported.	January.	February.	March.	April.	May.	June.	July.	
1	2	3	4	5	6	7	8	9	10	11	12	13	
	AMBALA DIVISION.												
1	Hissar	27	26	963	367	348	350	234	191	195	104	39	
2	Rohtak	19	16	731	50	5	24	18	19	11	11	12	
3	Gurgaon	24	22	1,367	84	38	21	44	42	55	22	5	
4	Karnal	25	20	1,382	163	44	93	89	61	83	62	53	
5	Ambala	19	17	1,715	188	89	103	173	222	301	244	151	
6	Simla	3	2	23	2	2	...	8	4	...	1	1	
	JULLUNDUR DIVISION.												
7	Kangra	17	14	713	66	15	13	8	10	21	6	2	
8	Hoshiarpur	24	22	2,108	307	192	266	268	240	310	218	86	
9	Jullundur	17	14	1,215	372	448	474	330	293	369	167	59	
10	Ludhiana	15	14	858	284	186	292	288	207	230	131	74	
11	Ferozepore	24	24	1,500	422	1,147	1,072	699	313	294	166	102	
	LAHORE DIVISION.												
12	Lahore	27	27	1,194	693	1,053	791	495	247	350	232	114	
13	Amritsar	15	15	1,039	386	323	344	233	124	200	132	94	
14	Gurdaspur	22	21	2,238	698	102	157	139	124	156	121	79	
15	Sialkot	21	21	2,349	585	397	434	455	306	399	174	91	
16	Gujranwala	29	27	1,736	379	239	228	148	87	107	43	12	
	RAWALPINDI DIVISION.												
17	Gujrat	15	14	1,326	479	434	413	412	274	215	129	66	
18	Shahpur	23	23	1,055	73	413	511	412	205	253	93	30	
19	Jhelum	14	13	898	187	132	122	74	45	41	18	12	
20	Rawalpindi	13	12	1,177	148	78	71	68	58	29	26	11	
21	Attock	13	13	628	211	518	400	319	193	134	85	35	
22	Mianwali	15	15	396	91	42	43	39	35	48	24	26	
	MULTAN DIVISION.												
23	Montgomery	17	17	1,348	953	521	437	350	101	47	29	23	
24	Lyallpur	19	9	1,278	797	928	870	572	234	193	75	48	
25	Jhang	13	13	955	442	284	310	316	221	199	122	64	
26	Multan	18	17	1,353	107	125	204	147	65	76	37	20	
27	Muzaffargarh	23	22	860	302	82	101	143	99	140	84	80	
28	Dera Ghazi Khan	21	5	707	155	323	407	382	236	175	102	49	
	Total for the Province ..	532	475	33,112	8,991	8,503	8,551	6,863	4,256	4,636	2,658	1,433	

No. VIII.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1913.

					6			7		8			9	10
					TOTAL.			NUMBER OF DEATHS AMONG CHILDREN.		RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for previous five years.	No.
August.	September.	October.	November.	December.	Males.	Females.	Total.	Under one year.	Over one year and under ten years.	Males.	Females.	Total.		
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
22	16	5	2	5	779	782	1,511	496	808	1·78	2·00	1·88	0·79	1
7	3	1	3	11	63	62	125	40	71	0·16	0·19	0·17	0·27	2
...	2	2	3	6	126	114	240	106	112	0·32	0·34	0·33	0·63	3
14	13	12	5	3	290	247	537	161	259	0·66	0·68	0·67	0·47	4
73	18	11	12	15	747	665	1,412	618	494	2·09	2·42	2·23	0·74	5
...	...	...	...	...	13	3	16	...	1	0·59	0·23	0·46	0·28	6
4	1	2	1	4	70	17	87	9	10	0·18	0·05	0·11	0·06	7
45	10	12	26	43	866	850	1,716	482	712	1·73	2·04	1·87	0·52	8
21	5	2	3	13	1,134	1,050	2,184	640	1,010	2·57	3·02	2·77	0·60	9
36	20	8	7	16	822	673	1,495	471	737	2·30	3·61	2·89	0·65	10
52	30	28	27	25	2,102	1,853	3,955	1,243	2,021	4·04	4·49	4·24	1·42	11
75	52	25	34	20	1,843	1,645	3,488	1,089	1,929	3·17	3·77	3·43	1·47	12
60	37	21	24	10	849	753	1,602	491	844	1·71	1·96	1·82	0·77	13
41	14	8	6	12	499	460	959	264	463	1·07	1·26	1·15	0·42	14
38	10	6	10	6	1,207	1,119	2,326	638	1,279	2·27	2·59	2·41	0·89	15
2	...	1	...	2	475	394	869	260	446	0·92	0·97	0·94	0·38	16
25	18	6	14	24	977	1,053	2,030	759	1,009	2·44	3·05	2·72	0·81	17
17	5	3	3	2	1,032	915	1,947	555	937	2·74	2·95	2·83	0·88	18
4	8	...	...	1	223	234	457	148	220	0·85	0·97	0·91	1·01	19
7	...	2	3	4	162	195	357	112	134	0·61	0·81	0·70	0·78	20
20	10	1	6	9	778	952	1,730	653	749	2·88	3·89	3·36	0·86	21
9	...	5	3	4	134	144	278	76	102	0·74	0·89	0·81	0·51	22
5	7	5	4	2	802	729	1,531	515	834	2·74	3·01	2·86	1·40	23
23	10	6	10	11	1,567	1,413	2,980	932	1,527	3·22	3·81	3·47	1·30	24
28	13	1	4	1	806	757	1,563	401	723	2·91	3·18	3·03	0·41	25
13	12	13	13	18	381	362	743	329	291	0·88	0·99	0·93	0·30	26
56	22	2	6	6	452	369	821	183	202	1·47	1·41	1·44	0·38	27
22	9	9	7	7	927	801	1,728	475	610	3·40	3·52	3·46	0·39	28
719	345	197	236	280	20,126	18,561	38,687	12,146	18,534	1·90	2·13	2·00	0·72	

DEATHS REGISTERED FROM FEVERS IN THE DISTRICTS OF THE

1	2	3	4	5							
No.	DISTRICTS.	CIRCLES OF REGIS- TRATION.		VILLAGES.		MONTHS.					
		Number in each dis- trict.	Number from which deaths from fevers were reported.	Number in each dis- trict.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June.
1	2	3	4	5	6	7	8	9	10	11	12
AMBALA DIVISION.											
1	Hissar	27	27	963	963	1,297	1,399	1,321	1,421	1,414	1,372
2	Rohtak	19	19	731	714	1,005	983	944	1,185	1,314	1,125
3	Gurgaon	24	24	1,367	1,144	1,233	1,329	1,143	1,145	1,063	982
4	Karnal	25	25	1,382	1,283	1,416	1,366	1,252	1,403	1,450	1,397
5	Ambala... ..	19	19	1,715	1,695	931	903	1,281	1,351	1,383	868
6	Simla	3	3	23	18	21	14	30	22	32	20
JULLUNDUR DIVISION.											
7	Kangra... ..	17	17	713	469	932	1,001	1,029	1,048	1,242	948
8	Hoshiarpur	24	24	2,108	1,961	1,473	1,440	1,537	1,653	1,781	1,392
9	Jullundur	17	17	1,215	739	807	799	834	937	1,244	1,102
10	Ludhiana	15	15	858	733	457	435	473	512	556	464
11	Ferozepore	24	24	1,500	1,306	944	909	870	869	959	879
LAHORE DIVISION.											
12	Lahore	27	27	1,194	1,076	1,194	1,059	1,027	1,069	1,364	1,441
13	Amritsar	15	15	1,039	911	1,039	890	934	1,085	1,674	1,367
14	Gurdaspur	22	22	2,238	1,587	917	761	810	747	1,239	960
15	Sialkot	21	21	2,349	2,186	1,213	924	982	855	1,245	962
16	Gujranwala	29	29	1,736	1,736	1,491	1,218	1,159	848	1,257	1,169
RAWALPINDI DIVISION.											
17	Gujrat	15	15	1,326	1,299	1,108	852	701	708	734	686
18	Shahpur	23	23	1,055	823	732	602	609	576	648	787
19	Jhelum	14	14	898	896	783	739	614	560	521	471
20	Rawalpindi	13	13	1,177	1,145	1,020	929	877	742	645	572
21	Attock	13	13	628	594	943	835	763	698	624	580
22	Mianwali	15	15	396	387	623	568	569	508	530	453
MULTAN DIVISION.											
23	Montgomery	17	17	1,348	1,105	696	627	526	421	425	372
24	Lyallpur	19	19	1,278	1,095	1,002	928	1,025	850	1,196	960
25	Jhang	13	13	955	882	502	498	579	472	583	516
26	Multan	18	18	1,353	1,336	1,248	1,158	1,167	980	1,196	1,041
27	Muzaffargarh	23	23	860	714	1,148	996	969	826	839	681
28	Dera Ghazi Khan	21	21	707	612	498	400	469	538	549	461
Total for the Province ...		532	532	33,112	29,409	26,673	24,567	24,494	24,029	27,707	24,038

No. IX.

PUNJAB DURING EACH MONTH OF THE YEAR 1913.

						6			7			8	9
						TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for pre- vious five years.	Number.
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.		
13	14	15	16	17	18	19	20	21	22	23	24	25	26
1,123	1,119	950	1,103	1,070	1,243	7,730	7,102	14,832	17.63	19.38	18.43	23.02	1
1,157	956	879	1,014	1,325	1,484	7,024	6,347	13,371	18.23	19.27	18.71	25.69	2
912	747	682	745	837	1,025	6,356	5,537	11,893	16.33	16.29	16.31	27.71	3
1,352	1,281	1,685	2,405	2,483	2,347	10,304	9,533	19,837	23.54	26.33	24.80	25.27	4
867	934	1,468	2,010	1,685	1,765	7,982	7,469	15,451	22.33	27.15	24.43	21.24	5
37	51	23	33	52	29	218	156	374	9.90	12.04	10.69	8.90	6
881	987	1,132	1,235	1,045	1,169	6,304	6,351	12,655	15.82	17.24	16.51	19.26	7
1,252	1,177	1,293	1,561	1,431	1,488	9,057	8,421	17,478	18.06	20.19	19.03	22.64	8
886	918	857	1,026	1,073	1,055	5,859	5,679	11,538	13.30	16.35	14.64	17.45	9
506	475	407	609	628	642	3,104	3,060	6,164	10.57	13.68	11.92	18.10	10
708	666	678	768	973	1,093	5,207	5,109	10,316	10.00	12.38	11.05	16.87	11
1,431	1,570	1,517	1,833	1,742	1,547	8,734	8,060	16,794	15.02	18.48	16.50	19.30	12
1,134	1,255	1,336	1,871	1,948	1,692	8,334	7,891	16,225	16.82	20.56	18.45	24.01	13
938	824	1,051	1,263	1,205	1,107	6,082	5,740	11,822	13.05	15.66	14.20	17.56	14
926	1,060	1,412	2,050	2,068	1,673	7,783	7,587	15,370	14.66	17.54	15.96	19.62	15
1,117	1,136	1,237	2,447	2,557	2,600	9,469	8,767	18,236	18.27	21.64	19.75	21.27	16
808	825	1,008	1,345	1,170	1,405	5,729	5,621	11,350	14.30	16.29	15.22	19.37	17
574	518	612	1,079	1,321	1,466	4,826	4,698	9,524	12.80	15.13	13.86	17.41	18
480	520	721	1,033	1,168	1,089	4,413	4,286	8,699	16.83	17.71	17.25	20.14	19
566	780	1,160	1,696	1,454	1,426	5,943	5,924	11,867	22.20	24.69	23.38	20.41	20
568	633	732	1,127	1,363	1,363	5,241	4,993	10,234	19.38	20.39	19.86	20.28	21
330	362	425	760	966	965	3,557	3,502	7,059	19.77	21.69	20.68	20.29	22
370	382	340	470	575	677	3,092	2,789	5,881	10.56	11.50	10.99	18.36	23
701	793	708	1,052	1,161	1,273	5,860	5,789	11,649	12.03	15.61	13.58	14.49	24
406	447	427	846	1,516	1,625	4,194	4,223	8,417	15.13	17.71	16.33	17.93	25
887	862	889	1,328	1,694	1,572	7,247	6,775	14,022	16.64	18.51	17.50	20.84	26
623	527	708	1,504	2,028	1,649	6,442	6,056	12,498	20.89	23.19	21.95	24.02	27
448	425	561	1,125	1,408	1,260	4,383	3,759	8,142	16.09	16.53	16.29	20.18	28
21,988	22,235	24,904	35,338	37,996	37,729	170,474	161,224	331,698	16.07	18.47	17.15	20.46	

DEATHS REGISTERED FROM DYSENTERY AND DIARRHOEA IN THE

I No.	2 DISTRICTS.			3 CIRCLES OF REGISTRATION.		4 VILLAGES.		5 MONTHS					
				Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.	Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.	January.	February.	March.	April.	May.	June.
1	2			3	4	5	6	7	8	9	10	11	12
	AMBALA DIVISION.												
1	Hissar ...	...	...	27	23	963	135	11	17	19	32	32	37
2	Rohtak...	...	...	19	19	731	107	17	14	15	16	28	21
3	Gurgaon	...	...	24	24	1,367	289	57	88	57	48	66	67
4	Karnal	...	...	25	25	1,382	185	40	25	31	30	43	58
5	Ambala	...	...	19	18	1,715	157	17	18	21	18	43	33
6	Simla ...	...	...	3	3	23	14	3	1	...	5	2	10
	JULLUNDUR DIVISION.												
7	Kangra	...	...	17	17	713	297	16	15	14	17	41	62
8	Hoshiarpur	...	...	24	15	2,108	26	5	3	...	4	9	8
9	Jullundur	...	...	17	17	1,215	71	20	17	22	42	41	35
10	Ludhiana	...	...	15	15	858	66	1	5	13	14	7	29
11	Ferozepore	...	...	24	24	1,500	41	13	19	19	17	34	32
	LAHORE DIVISION.												
12	Lahore ...	...	...	27	26	1,194	188	37	21	29	54	55	63
13	Amritsar	...	...	15	15	1,039	205	39	29	23	38	89	95
14	Gurdaspur	...	...	22	22	2,238	411	24	29	25	39	129	93
15	Sialkot ...	...	...	21	21	2,349	497	41	24	40	48	77	73
16	Gujranwala	...	...	29	19	1,736	56	14	5	11	14	15	14
	RAWALPINDI DIVISION.												
17	Gujrat ...	...	...	15	15	1,326	127	17	12	13	14	26	11
18	Shahpur	...	...	23	22	1,055	105	10	9	9	10	13	26
19	Jhelum	...	...	14	14	898	89	12	17	9	13	17	14
20	Rawalpindi	...	...	13	13	1,177	278	150	162	218	173	146	109
21	Attock	...	...	13	10	628	27	4	2	1	8	1	3
22	Mianwali	...	...	15	15	396	68	10	12	12	14	18	8
	MULTAN DIVISION.												
23	Montgomery	...	...	17	16	1,348	45	6	7	8	7	5	9
24	Lyallpur	...	...	19	19	1,278	139	28	24	28	25	43	25
25	Jhang ...	...	...	13	13	955	103	33	19	17	13	23	15
26	Multan ...	...	...	18	13	1,353	44	17	10	16	23	13	18
27	Muzaffargarh	...	...	23	20	860	53	10	8	5	4	13	1
28	Dera Ghazi Khan	...	...	21	19	707	90	39	50	41	8	13	21
	Total for the Province			532	492	33,112	3,861	696	612	716	748	1,047	995

No. X.

DISTRICTS OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1913.

						6			7			8	9
						TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for previous five years	No.
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.		
13	14	15	16	17	18	19	20	21	22	23	24	25	26
42	28	34	19	64	48	204	179	383	0.47	0.49	0.48	0.41	1
47	32	38	29	27	15	171	128	299	0.44	0.39	0.42	0.49	2
77	67	40	49	48	37	325	326	651	0.84	0.96	0.89	1.43	3
44	52	29	36	45	38	278	193	471	0.64	0.53	0.59	0.67	4
56	36	26	50	37	41	230	171	401	0.64	0.62	0.63	1.08	5
4	1	4	4	3	3	18	22	40	0.82	1.70	1.14	2.24	6
39	32	31	41	28	35	186	185	371	0.47	0.50	0.48	1.16	7
6	5	3	5	4	4	31	25	56	0.06	0.06	0.06	0.09	8
33	35	24	25	27	31	210	142	352	0.48	0.41	0.45	0.63	9
22	17	10	14	21	19	117	55	172	0.40	0.25	0.33	0.44	10
21	25	20	19	26	41	172	119	291	0.33	0.29	0.31	0.46	11
65	106	85	72	47	61	402	293	695	0.69	0.67	0.68	0.61	12
69	81	97	84	127	74	517	328	845	1.04	0.85	0.96	0.94	13
71	65	65	76	88	63	437	330	767	0.94	0.90	0.92	1.02	14
72	97	123	140	108	90	520	413	933	0.98	0.95	0.97	0.91	15
5	19	13	15	11	26	111	51	162	0.21	0.13	0.18	0.23	16
19	35	48	51	48	29	176	147	323	0.44	0.43	0.43	0.43	17
15	11	17	25	21	17	100	83	183	0.27	0.27	0.27	0.27	18
20	25	19	28	14	16	138	66	204	0.53	0.27	0.40	0.48	19
119	132	121	211	228	219	1,054	934	1,988	3.94	3.89	3.92	2.25	20
4	4	2	2	6	3	24	16	40	0.09	0.07	0.08	0.16	21
8	13	22	16	15	20	97	71	168	0.54	0.44	0.49	0.67	22
2	3	3	8	3	5	44	22	66	0.15	0.09	0.12	0.25	23
28	20	25	26	28	18	188	130	318	0.39	0.35	0.37	0.44	24
18	20	26	36	35	30	152	133	285	0.55	0.56	0.55	0.77	25
18	20	21	42	30	24	134	123	257	0.31	0.34	0.32	0.43	26
2	3	3	8	15	13	53	32	85	0.17	0.12	0.15	0.25	27
13	9	14	12	13	26	156	103	259	0.57	0.45	0.52	0.30	28
989	993	963	1,143	1,167	1,046	6,245	4,820	11,065	0.59	0.55	0.57	0.64	

DEATHS REGISTERED FROM RESPIRATORY DISEASES IN THE DISTRICTS

1	2	3	4	5							
No.	DISTRICTS.	CIRCLES OF REGIS- TRATION.		VILLAGES.		MONTHS.					
		Number in each dis- trict.	Number from which deaths from respi- ratory diseases were reported.	Number in each dis- trict.	Number from which deaths from respi- ratory diseases were reported.	January.	February.	March.	April.	May.	June.
1	2	3	4	5	6	7	8	9	10	11	12
AMBALA DIVISION.											
1	Hissar	27	22	963	228	112	131	118	92	65	77
2	Rohtak	19	19	731	341	86	121	109	152	116	83
3	Gurgaon	24	24	1,367	434	199	201	151	152	125	109
4	Karnal	25	25	1,382	403	191	195	146	195	182	191
5	Ambala	19	19	1,715	322	108	112	125	114	87	344
6	Simla... ..	3	3	23	19	5	9	18	18	7	12
JULLUNDUR DIVISION.											
7	Kangra	17	17	713	643	198	169	322	152	132	132
8	Hoshiarpur	24	24	2,108	795	200	257	294	214	178	162
9	Jullundur	17	17	1,215	324	416	442	366	345	328	245
10	Ludhiana	15	15	858	340	165	136	142	161	133	96
11	Ferozepore	24	24	1,500	286	148	172	165	148	114	98
LAHORE DIVISION.											
12	Lahore	27	27	1,194	492	186	153	142	195	156	164
13	Amritsar	15	15	1,039	498	256	250	293	205	307	234
14	Gurdaspur	22	22	2,238	2,071	622	720	803	658	829	658
15	Sialkot	21	21	2,349	1,498	397	367	379	280	371	273
16	Gujranwala	29	29	1,736	280	105	54	61	62	56	50
RAWALPINDI DIVISION.											
17	Gujrat	15	15	1,326	893	255	210	195	162	166	126
18	Shahpur	23	23	1,055	443	66	65	47	44	26	43
19	Jhelum	14	14	898	403	87	78	80	68	81	72
20	Rawalpindi	13	13	1,177	351	115	120	110	65	86	55
21	Attock	13	13	628	185	50	60	53	46	57	40
22	Mianwali	15	15	396	93	32	24	24	22	16	25
MULTAN DIVISION.											
23	Montgomery	17	17	1,348	51	25	12	8	...	11	7
24	Lyallpur	19	19	1,278	361	89	91	102	86	67	60
25	Jhang	13	13	955	131	91	75	68	35	21	16
26	Multan	18	5	1,353	3	3	...	4	2	...	...
27	Muzaffargarh	23	15	860	28	3	2	6	2	5	4
28	Dera Ghazi Khan	21	21	707	60	36	46	41	12	2	20
Total for the Province ...		532	506	33,112	11,976	4,255	4,272	4,372	3,687	3,724	3,396

No. XI.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1913.

						6			7			8	9
						TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 previous five years.	No.
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.		
13	14	15	16	17	18	19	20	21	22	23	24	25	26
55	41	54	67	58	82	523	429	952	1·19	1·17	1·18	1·24	1
80	69	48	80	87	110	566	575	1,141	1·47	1·75	1·60	3·38	2
108	91	68	88	117	153	780	782	1,562	2·00	2·30	2·14	3·21	3
142	85	104	105	175	181	936	956	1,892	2·14	2·64	2·37	2·48	4
280	163	63	73	76	136	925	756	1,681	2·59	2·75	2·66	4·05	5
6	12	5	7	6	7	66	46	112	3·00	3·55	3·20	5·35	6
153	105	120	117	137	194	1,099	832	1,931	2·76	2·26	2·52	2·05	7
138	113	128	150	184	219	1,322	924	2,246	2·64	2·22	2·45	2·68	8
222	265	207	239	253	344	2,003	1,669	3,672	4·55	4·80	4·66	4·56	9
91	71	71	91	103	136	767	629	1,396	2·61	2·81	2·70	3·19	10
98	97	95	111	118	167	839	692	1,531	1·61	1·68	1·64	1·57	11
142	163	120	153	146	177	994	905	1,899	1·71	2·07	1·87	1·70	12
234	231	193	338	334	321	1,636	1,560	3,196	3·30	4·06	3·63	3·05	13
636	696	827	833	911	947	4,962	4,178	9,140	10·65	11·40	10·98	10·29	14
322	364	415	483	384	431	2,409	2,057	4,466	4·54	4·76	4·64	4·43	15
61	62	39	65	58	80	440	313	753	0·85	0·77	0·82	0·73	16
137	160	244	223	174	239	1,232	1,059	2,291	3·08	3·07	3·07	2·51	17
41	33	35	52	46	55	326	227	553	0·86	0·73	0·80	0·67	18
70	65	74	66	61	92	448	446	894	1·71	1·84	1·77	1·29	19
59	61	81	105	127	102	589	497	1,086	2·20	2·07	2·14	1·30	20
60	57	54	54	32	24	304	283	587	1·12	1·16	1·14	0·74	21
14	18	14	19	20	14	139	103	242	0·77	0·64	0·71	0·51	22
15	9	5	5	5	8	63	47	110	0·22	0·19	0·21	0·38	23
50	30	44	64	73	98	481	373	854	0·99	1·01	1·00	0·86	24
16	15	17	18	21	73	287	179	466	1·04	0·75	0·90	1·30	25
...	1	1	1	...	1	9	4	13	0·02	0·01	0·02	0·14	26
5	4	2	4	5	3	27	18	45	0·09	0·07	0·08	0·17	27
11	6	2	15	7	34	153	79	232	0·56	0·35	0·46	0·60	28
3,246	3,087	3,130	3,626	3,720	4,428	24,325	20,618	44,943	2·29	2·36	2·32	2·33	

DEATHS REGISTERED FROM PLAGUE IN THE

1	2	3		4		5					
No.	DISTRICTS.	CIRCLES OF RE- GISTRATION.		VILLAGES.		MONTHS.					
		Number in each dis- trict.	Number from which deaths from plague were reported.	Number in each dis- trict.	Number from which deaths from plague were reported.	January.	February.	March.	April.	May.	June.
1	2	3	4	5	6	7	8	9	10	11	12
	AMBALA DIVISION.										
1	Hissar ...	27	11	963	18	...	13	34	69	34	20
2	Rohtak ...	19	17	731	88	69	112	292	877	430	111
3	Gurgaon ...	24	18	1,367	183	220	292	1,009	2,113	943	187
4	Karnal ...	25	16	1,382	104	84	336	623	1,197	912	175
5	Ambala ...	19	6	1,715	15	1	...	2	17	20	...
6	Simla ...	3	...	23	...	...	...	...	...	...	...
	JULLUNDUR DIVISION.										
7	Kangra ...	17	1	713	2	...	...	...	...	...	...
8	Hoshiarpur ...	24	19	2,108	341	71	54	91	263	251	39
9	Jullundur ...	17	14	1,215	41	7	37	74	217	142	22
10	Ludhiana ...	15	6	858	39	3	5	51	86	62	25
11	Ferozepore ...	24	5	1,500	29	...	1	13	69	68	1
	LAHORE DIVISION.										
12	Lahore ...	27	9	1,194	17	...	...	5	18	32	6
13	Amritsar ...	15	7	1,039	26	6	10	26	155	147	56
14	Gurdaspur ...	22	15	2,238	104	40	57	203	355	240	37
15	Sialkot ...	21	13	2,349	107	28	54	187	484	381	64
16	Gujranwala ...	29	14	1,736	104	11	50	155	572	541	98
	RAWALPINDI DIVISION.										
17	Gujrat ...	15	9	1,326	14	...	...	3	11	5	1
18	Shahpur ...	23	4	1,055	3	...	4	...	1	1	3
19	Jhelum ...	14	3	898	14	5	19	59	152	55	...
20	Rawalpindi ...	13	6	1,177	12	4	...	1	2	1	...
21	Attock ...	13	5	628	3	1	...	...	...	1	...
22	Mianwali ...	15	...	396	...	...	...	...	...	...	...
	MULTAN DIVISION.										
23	Montgomery ...	17	...	1,348	...	...	...	...	...	...	...
24	Lyallpur ...	19	2	1,278	1	...	...	...	2	...	...
25	Jhang ...	13	4	955	5	...	2	2	34	22	5
26	Multan ...	18	...	1,353	...	...	...	...	...	...	...
27	Muzaffargarh ...	23	...	860	...	...	...	...	...	...	...
28	Dera Ghazi Khan ...	21	...	707	...	...	...	...	...	...	...
	Total for the Province ...	532	204	33,112	1,270	550	1,046	2,830	6,694	4,288	850

No. XII.

DISTRICTS OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1913.

						6			7			8	9
						TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for previous five years.	No.
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.		
13	14	15	16	17	18	19	20	21	22	23	24	25	26
3	19	4	3	6	10	117	98	215	0·27	0·27	0·27	4·99	1
15	5	4	8	28	53	1,029	975	2,004	2·67	2·96	2·80	9·78	2
61	67	18	27	87	161	2,534	2,591	5,125	6·51	7·62	7·03	13·23	3
36	7	...	13	88	82	1,770	1,783	3,553	4·04	4·92	4·44	6·77	4
3	...	2	17	13	20	56	39	95	0·16	0·14	0·15	4·80	5
...	...	...	...	...	...	...	...	...	...	...	...	...	6
...	...	...	1	3	5	6	3	9	0·02	0·01	0·01	0·72	7
4	3	2	7	27	43	419	436	855	0·84	1·05	0·93	5·96	8
6	...	3	5	13	16	290	262	552	0·66	0·75	0·70	3·71	9
2	1	...	...	7	9	118	133	251	0·40	0·59	0·49	9·14	10
...	...	...	...	...	...	72	80	152	0·14	0·19	0·16	6·62	11
...	...	...	...	...	...	36	25	61	0·06	0·06	0·06	3·55	12
11	1	5	...	...	3	218	202	420	0·44	0·53	0·48	7·66	13
8	2	1	5	31	57	479	557	1,036	1·03	1·52	1·24	6·88	14
29	4	...	3	9	19	609	653	1,262	1·15	1·51	1·31	4·55	15
6	...	1	22	20	73	758	791	1,549	1·46	1·95	1·68	4·71	16
14	1	...	...	...	2	28	9	37	0·07	0·03	0·05	0·77	17
...	...	...	2	...	4	10	5	15	0·03	0·02	0·02	2·23	18
2	...	...	1	8	1	162	140	302	0·62	0·58	0·60	0·95	19
1	14	51	128	85	7	181	113	294	0·68	0·47	0·58	0·43	20
...	...	3	4	...	...	6	3	9	0·02	0·01	0·02	0·16	21
...	...	...	...	...	...	...	...	...	...	...	...	0·03	22
...	...	...	...	...	...	...	...	...	...	...	...	2·29	23
...	...	...	...	...	...	1	1	2	0·002	0·002	0·002	2·19	24
4	...	2	1	2	5	42	37	79	0·15	0·16	0·15	1·00	25
...	...	...	...	...	...	...	...	...	...	...	...	0·37	26
...	...	...	...	...	...	...	...	...	...	...	...	0·01	27
...	...	...	...	...	...	...	...	...	...	...	...	0·01	28
205	124	96	247	427	520	8,941	8,936	17,877	0·84	1·02	0·92	4·17	

STATEMENT No. I. .

MONTHLY STATEMENT OF PLAGUE OCCURRENCES IN BRITISH DISTRICTS AND
NATIVE STATES IN THE PUNJAB DURING THE YEAR 1913.

STATEMENT

MONTHLY STATEMENT OF PLAGUE OCCURRENCES IN BRITISH

Serial No.	District or Native State,	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Hissar ...	...	...	22	13	42	34	132	69	93	34	38	20
2	Rohtak ...	97	69	189	112	403	292	983	877	501	430	115	111
3	Gurgaon ...	241	220	306	292	1,099	1,009	2,322	2,113	1,125	943	226	187
4	Karnal ...	76	84	281	336	589	623	1,104	1,197	1,188	912	116	175
5	Ambala ...	1	1	...	...	2	2	28	17	27	20	...	...
6	Simla ...	...	...	...	...	...	...	...	...	...	...	...	...
7	Kangra ...	...	...	...	...	...	...	3	...	5	...	...	...
8	Hoshiarpur ...	71	71	54	54	96	91	269	263	271	251	39	39
9	Jullundur ...	19	7	101	37	112	74	404	217	207	142	26	22
10	Ludhiana ...	12	3	4	5	77	51	144	86	116	62	10	25
11	Ferozepore ...	...	...	1	1	87	13	274	69	140	68	1	1
12	Lahore ...	...	...	...	...	5	5	40	18	52	32	19	6
13	Amritsar ...	8	6	12	10	28	26	163	155	159	147	59	56
14	Gurdaspur ...	52	40	71	57	240	203	427	355	265	240	50	37
15	Sialkot ...	33	28	54	54	206	187	536	485	454	381	66	64
16	Gujranwala ...	10	11	40	50	259	155	710	572	612	541	82	98
17	Gujrat ...	...	...	...	...	4	8	18	11	4	5	7	1
18	Shahpur ...	...	...	4	4	...	...	1	1	1	1	3	3
19	Jhelum ...	10	5	36	19	132	59	264	152	88	55	...	...
20	Rawalpindi ...	6	4	2	...	4	2	10	4	8	5	...	...
21	Attock ...	1	1	...	...	...	...	1	...	1	1	...	...
22	Mianwali ...	...	...	...	...	...	...	...	...	...	...	...	...
23	Montgomery ...	...	...	...	...	1	...	...	...	...	...	...	...
24	Lyallpur ...	...	...	...	...	...	...	4	2	...	...	...	...
25	Jhang ...	...	...	2	2	3	2	51	34	37	22	7	5
26	Multan ...	...	...	...	...	...	...	...	...	...	...	...	...
27	Muzaffargarh ...	...	...	...	...	...	...	...	...	...	...	...	...
28	Dera Ghazi Khan ...	...	...	...	...	...	...	...	...	...	...	...	...
Total British Districts		637	550	1,179	1,046	3,389	2,831	7,888	6,697	5,354	4,292	824	850
1	Patiala ...	119	107	204	159	394	318	552	459	526	203	260	221
2	Kapurthala ...	...	...	6	3	51	26	89	85	51	32	4	5
3	Maler Kotla ...	...	...	...	...	...	...	...	...	...	...	...	...
4	Mund ...	34	13	63	44	148	100	267	159	54	34	18	11
5	Kasbia ...	5	3	...	...	...	...	...	...	...	...	...	...
6	Faridkot ...	...	...	...	...	...	...	14	3	6	2	1	...
7	Nabha ...	...	...	8	8	34	26	92	59	37	44	6	9
8	Patauli ...	...	...	...	...	19	7	76	15	5	2	...	...
9	Bahawalpur ...	...	...	...	...	...	...	...	...	...	...	...	...
10	Nalagarh ...	...	...	...	...	...	...	...	...	...	...	...	...
11	Ferozepur ...	...	...	...	...	...	...	...	...	...	...	...	...
Total Native States...		158	123	281	214	646	477	1,030	730	679	317	289	246
GRAND TOTAL ...		795	673	1,460	1,260	4,035	3,308	8,918	7,427	6,033	4,609	1,153	1,096

N.B.—The total deaths during the year in Sialkot and Rawalpindi

No. I.

DISTRICTS AND NATIVE STATES IN THE PUNJAB DURING THE YEAR 1913.

JULY.		AUGUST.		SEPTEMBER		OCTOBER.		NOVEMBER.		DECEMBER.		TOTAL.		Serial No.	REMARKS.
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
17	3	35	19	13	4	5	3	12	6	11	10	420	215	1	
23	15	9	5	8	4	26	8	36	28	69	53	2,459	2,004	2	
66	61	86	67	19	18	37	27	87	87	127	101	5,741	5,125	3	
20	36	9	7	...	...	2	13	86	88	77	82	3,548	3,553	4	
3	3	...	...	2	2	21	17	18	13	24	20	126	95	5	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	
...	...	...	...	...	...	4	1	3	3	9	6	24	9	7	
4	4	3	3	2	2	7	7	27	27	43	43	886	855	8	
12	6	...	...	7	3	11	5	31	13	69	26	999	552	9	
2	2	1	1	...	...	...	...	17	7	16	9	398	251	10	
...	...	...	...	...	...	...	...	...	...	...	...	503	152	11	
...	...	...	...	...	...	...	...	...	...	...	...	116	61	12	
12	11	1	1	5	5	...	...	...	...	8	3	450	420	13	
12	8	6	2	4	1	10	5	50	31	75	57	1,262	1,036	14	
29	29	4	4	...	...	3	3	11	9	19	19	1,415	1,263	15	
9	6	...	...	1	1	28	22	46	20	49	73	1,846	1,549	16	
14	14	1	1	...	...	...	...	...	...	2	2	50	37	17	
...	...	...	...	...	...	2	2	...	...	8	4	19	15	18	
2	2	1	...	1	...	1	1	9	8	1	1	545	302	19	
4	1	24	16	106	61	212	131	133	86	15	10	524	320	20	
...	...	...	...	3	3	4	4	2	...	...	...	12	9	21	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	23	
...	...	...	...	...	...	...	...	...	...	...	...	4	2	24	
7	4	...	...	6	2	1	1	2	2	5	5	121	79	25	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	26	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	27	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	28	
236	205	180	126	177	106	374	250	570	428	621	523	21,469	17,904		
19	9	2	2	16	16	19	18	73	59	57	53	2,241	1,624	1	
...	...	...	...	...	...	...	...	...	...	...	...	201	101	2	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	
13	10	13	8	...	1	...	...	...	...	...	...	610	380	4	
...	...	...	...	...	...	...	...	...	...	43	19	48	22	5	
...	...	...	...	...	...	...	...	...	...	...	...	21	5	6	
...	...	...	...	...	...	...	...	6	...	22	25	205	171	7	
...	...	...	...	...	...	...	...	...	...	...	...	40	24	8	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	
32	19	15	10	16	17	19	18	79	59	122	97	3,366	2,327		
268	224	195	136	193	123	393	268	649	487	743	620	24,835	20,231		

include 1 and 26 deaths, respectively, in Cantonments.

